

AHEAD OF TIME

The Red Cross and other organizations mostly beat the clock on system fixes for DST. **PAGE 16**

IMPRESS THE BOSS

Laurie Orlov says CEOs have low expectations of IT, but CIOs can change that. **PAGE 22**

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MARCH 19, 2007 • VOL. 41 • NO. 12 • \$5/COPY

Microsoft Gets Integration Push

Users say vendor needs more tools for linking its apps to other systems

BY MARC L. SONGINI
SAN DIEGO

At its Convergence 2007 user conference last week, Microsoft Corp. detailed a growing set of tools and services for connecting its business applications to other systems. But users, while noting that Microsoft has begun to make its applications less monolithic, said the software vendor needs to do more.

Five attendees interviewed here said they're looking for

INSIDE

Microsoft no longer sees a need to put its ERP apps on one code base. **Page 18**

Microsoft to provide simpler — and clearer — methods of integrating the company's Dynamics ERP and customer relationship management software with its other products and with applications from other vendors, using technologies such as Web services.

"What kills people in my role is that vendors don't make systems that talk together with other systems," said

Integration, page 14

IT Braces for 'J-SOX' Rules

Japan imposing new financial controls framework similar to Sarbanes-Oxley

BY THOMAS HOFFMAN

Japanese companies and their international subsidiaries have started prepping for next year's implementation of a corporate governance framework that's comparable to the requirements imposed by the Sarbanes-Oxley Act in the U.S.

Many U.S.-based IT manag-

ers have started working on processes to ensure compliance with the emerging financial controls requirements, informally known as J-SOX, even though initial details aren't expected until next month.

"This is just like the early stages of Sarbanes-Oxley

J-SOX, page 48

..... KNOWLEDGE CENTER SECURITY



Security for Web 2.0

**SPECIAL
REPORT**

How to keep corporate secrets safe in the new Web world. **Page 25**

Future-Proof

The information age is here. But are you ready for the information demands of tomorrow?

"Data volumes are growing at exponential rates. With these vast stores of data, businesses are seeking ways to turn data into useful information that can be exploited for competitive advantage. The 2005 WinterCorp TopTen survey results reveal significant strengths for Microsoft SQL Server in the very large database market for both data warehousing and OLTP systems."

— Richard Winter
President
Winter Corporation

For many companies, access to information means everything. Not just market and financial information, but also customer buying trends and competitive intelligence. Information needs to be instantly available anytime, day or night. Building an information architecture that will meet today's demands and will easily scale for future needs requires a team with experience building highly advanced data center solutions. HP, Intel and Microsoft have proven solutions that deliver enterprise-class performance and reliability at lower cost through the use of the latest industry-standard technology.

Ten Terabytes of Customer Data And Growing — No Problem for PREMIER Bankcard

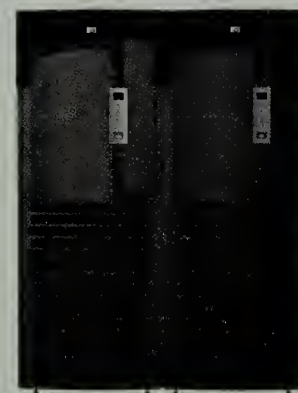
For PREMIER Bankcard, Inc. (PBI), rapid access to customer information is vital. With more than 5 million customers and over 10 tera-bytes of data, sifting through it all for just the right information is no easy task. PBI is constantly adding customers and additional data to support analytics, which increases the size of its database by over 300 gigabytes each month. In order to design a robust system that could handle its current data and transaction loads, and scale well into the future, PBI chose a solution from HP, Intel and Microsoft.

PREMIER Bankcard needed a complete data warehouse to conduct complex analyses of its credit card customer base. PBI chose the HP Integrity rx8620 server powered by 16 Intel® Itanium® 2 processors, an HP StorageWorks EVA5000 SAN system, Microsoft® Windows Server™ 2003 Datacenter Edition and Microsoft SQL Server™ 2005. The deep analysis is completed in layers, with over 30 power users performing elaborate queries directly in the data warehouse and over 2,000 users running hundreds of unique reports via SQL Server 2005 Reporting Service. PBI is using all aspects of Microsoft's Business Intelligence offerings including SQL Server Integration, Reporting and Analysis Services and Microsoft Office BI products. While the single 16-processor server provides more than enough power for PBI's current needs, the opportunity to move to an HP Integrity server in the future with 64 or more multi-core Itanium processors gives PBI the option to scale to virtually any level. "This solution is proving to contain the perfect combination of flexibility, scalability and performance required to support the high growth rate that we

have been enjoying," says Dan Zerfas, vice president of Software Development at PREMIER Bankcard, Inc.

A Major Transformation Toward Standards-Based Platforms

One reason PREMIER Bankcard has been so successful in building a scalable, yet affordable, database solution is that it leveraged industry-standard components. Standards-based computing systems have matured to the point where they can now handle the most demanding enterprise applications and workloads at lower cost and with greater flexibility than proprietary RISC and mainframe systems. This fundamental shift in com-



puting capability is helping many of the world's largest companies substantially reduce their total costs. Standards-based computing systems are also helping companies to future-proof their data centers by enabling them to easily scale up or down in response to business needs and market dynamics.

Enterprise server solutions from HP, Intel and Microsoft are at the center of this transformation. HP Integrity servers with

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dual-core 64-bit Intel® Itanium® 2 processors and the Microsoft® Windows Server 2003 operating system not only cost less than traditional enterprise systems — they also deliver comparable or better performance, scalability and availability. They are supported by a larger community of vendors, and reduce life-cycle costs through simplified management.

Standardization can also provide substantial benefits for users who need to access business data. By using a standardized reporting system based on SQL Server Reporting Services, reports have a consistent look and feel, and users are more productive. As a result, PBI has reduced the time-to-market of its analytic work by more than 90%. A

report that took a week to do manually can now be completed in as little as three hours. In addition, round-the-clock system dependability means analysis is available whenever PBI needs it. "A data warehouse is only as good as the data provided to the end user," says Zerfas. "The reliability and performance of Reporting Services running on an HP Integrity server allows our users to spend their time analyzing and managing information instead of pulling data."

For PREMIER Bankcard, rapid data access is everything. With the help of HP, Intel and Microsoft, the company has built a solution that will carry it successfully into the future. ■

Future-Proofing at Work: PREMIER Bankcard, Inc.

With more than 5 million customers, PREMIER Bankcard, Inc. (PBI) is one of the leading credit card companies in the United States. PBI needed online transaction processing (OLTP) and data warehouse solutions that could handle over 10 terabytes of customer information spread across several databases. With its new IT infrastructure using an Itanium®-based HP Integrity server running Microsoft® Windows Server™ 2003 and SQL Server™ 2005, PBI is able to handle its current and future data management needs.

"The technology in this HP/Intel/Microsoft solution is built to grow with our business. We don't have to worry about it," says Ron Van Zanten, managing officer of Business Intelligence at PREMIER Bankcard, Inc.

Challenges

- A system to handle over 10TB of data that grows 300GB per month
- Performance and reliability to allow instant, anytime access to customer reports and data
- A standards-based system to simplify management and the user experience

Solution

- HP Integrity rx8620 server with 16 Intel® Itanium® 2 processors and 64GB of RAM
- HP StorageWorks EVA5000
- Microsoft Windows Server 2003 Datacenter Edition
- Microsoft SQL Server 2005

Results

- Expandable infrastructure
- Stable environment with data that's more accessible
- Easier-to-use database systems that increase employee productivity
- Mission-critical system availability
- 90% faster production of data reports
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8 Notes 8 beta testers say the upgrade includes extensive user interface improvements that should make the e-mail client software more user-friendly.

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Data Center Moves: Best Practices

HARDWARE: More than half of all data centers will relocate or expand significantly by 2015, thanks mostly to new technologies like blade servers. Here's what you need to know to make the move a good one.

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gets advice from a "chief geek": If you think Web services are the only way to build SOA apps, think again.



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Security for Web 2.0

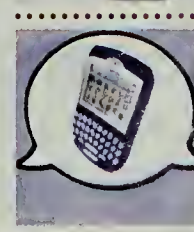
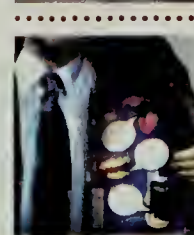
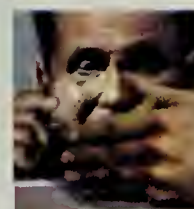
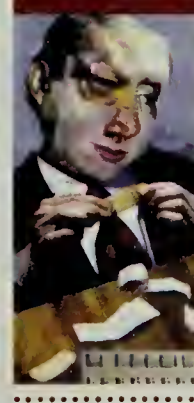
Editor's note: How companies are learning to keep their corporate secrets safe in the new Web world. **PACKAGE BEGINS ON PAGE 25**

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34 Your Gadgets Are Springing Leaks. Hand-held electronics are cheap enough for the average worker to own, which means more of these devices — and a greater

SPECIAL REPORT



variety of them — are getting hooked up to networks. Here's how to plug the holes.

38 The Conversation. "Thou shalt not" is a big turn-off for the Gen Y crowd. When spreading the message about small-device security, try face-to-face communication and sharp marketing.

40 Six Ways to Stop Data Leaks. A DuPont scientist's theft of \$400 million worth of proprietary information from a database of the chemical company highlights the need for controls to curb insider security threats. Here are some tips on how to mitigate risks and better track what's going on inside your firewall.

42 Q&A: Shred Your Bits for Safety's Sake. Jeff Jonas, chief scientist and distinguished engineer in IBM's Entity Analytic Solutions group, discusses a method of data protection known as anonymization.

44 Opinion: Get Serious. Columnist Mark Hall is angry that CIOs are too timid to tackle the problem of secure messaging. So he outlines a plan that they should follow.

MORE ONLINE

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TechCast: Web 2.0 poses technical, social and legal challenges for corporations. From user education to secure coding and insurance, there's lots to consider. Listen to our Web 2.0

Security Techcast for an overview of the ways companies should be responding.

Book excerpt: Secure applications require

good coding practices and sound principles to avoid breaches and hacks, according to the authors of *Professional Web 2.0 Programming*. Read more in this excerpt.

AT DEADLINE

Judge Dismisses Case Against Dunn

A California state court judge dismissed all of the charges filed against former Hewlett-Packard Co. Chairwoman Patricia Dunn in connection with last year's pretexting scandal at HP. Prosecutors had dropped felony charges against Dunn in return for her agreeing to plead guilty to a misdemeanor charge of fraudulent wire communications. But she never had to enter a plea because of the judge's action.

Livedoor Founder Gets Prison Term

Takafumi Horie, founder and former CEO of Japanese Internet portal operator Livedoor Co., was found guilty of violating securities laws by a judge in Tokyo District Court and sentenced to two and a half years in prison. The judge ruled that investment funds set up by Livedoor in Hong Kong and elsewhere were used to evade the law and had nothing to do with its business. He said e-mails showed that Horie knew of the transactions.

Cisco to Acquire WebEx for \$3.2B

Cisco Systems Inc. has agreed to acquire WebEx Communications Inc. for \$3.2 billion, giving the network equipment maker a foothold in the software-as-a-service market. The deal for WebEx, creator of an online collaboration service, is expected to close in the fourth quarter of Cisco's fiscal 2007. WebEx has 2,200 employees and reported \$380 million in 2006 revenue.

AT&T Plans to Invest \$750M in Network

AT&T Inc. said it expects to add features to its virtual private network service and expand high-speed connections as part of a plan to invest more than \$750 million in its global business network this year. The services will include the introduction of new class-of-service capabilities and help for customers in setting up VPN routing groups.

Internal Snafus Cause of Most Breaches, Study Says

Security incidents more likely to result from corporate mistakes than hackers

BY JAIKUMAR VIJAYAN

THIS YEAR, more than 72 million records containing Social Security and credit card numbers, birth dates and other personal data will be exposed to unauthorized users in the U.S., according to a study by researchers at the University of Washington in Seattle.

And, the researchers said, the main culprit isn't the oft-vilified malicious hacker. Instead, they blamed snafus inside companies as the biggest cause of data breaches.

That conclusion was based on a review of 550 security breaches that were reported in major U.S. news outlets between 1980 and last year. The goal was to examine the role that organizational behavior plays in privacy violations.

The study found that 61% of the incidents involved internal foul-ups, such as accidentally putting personal information online or losing track of backup tapes and other equipment.

In contrast, 31% of the breaches were perpetrated by external hackers, said Philip Howard, an assistant professor of communication at the University of Washington and a co-author of the report. The remainder of the breaches had unspecified causes, he added.

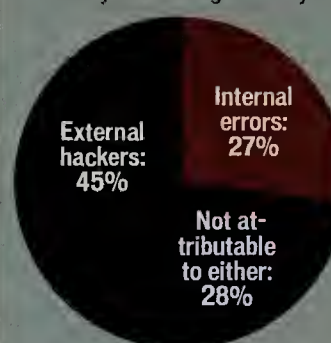
In the Numbers

The university study is reinforced by similar findings from other researchers. For instance, a report released last week by the IT Policy Compliance Group said that human error is the overwhelming cause of losses of sensitive data — contributing to 75% of all occurrences, compared with 20% for malicious hacking activity.

Similarly, in an electronic poll of attendees at Computerworld's Premier 100 IT Leaders Conference this month, the 161 respondents pointed to "activities by internal staffers," "ineffective policies" and "sloppy mobile workers" as the biggest sources of secu-

Data Grabs

Although internal errors led to a higher number of data breaches, **hackers are responsible for a larger percentage of the individual data records that were compromised**, according to a University of Washington study.



BASE: A study of 550 security breaches reported between 1980 and last December. A total of about 1.9 billion records were exposed in the incidents.

SOURCE: UNIVERSITY OF WASHINGTON, SEATTLE

rity breaches. Only 11% of the respondents fingered external hackers as the leading cause of breaches at their organizations.

Even in cases that were publicly blamed on hackers, the reality can be more nuanced, Howard said.

One example was the huge data breach at Acxiom Corp. in 2003, when a hacker who

was later caught stole 1.6 billion customer records. He was able to get at the data largely because of Acxiom's failure to establish proper access controls, Howard said.

Tom Lindblom, chief technology officer at Carpinteria, Calif.-based CKE Restaurants Inc., which owns fast-food chains such as Hardee's and Carl's Jr., said he thinks businesses are getting savvier about implementing internal controls that can mitigate the kinds of organizational problems highlighted by the University of Washington study. That's being driven partly by increased audit and regulatory requirements, he said.

As a result, Lindblom noted, it's hard to pinpoint whether hackers or internal problems pose the greater security risk at this point.

"I don't think it's a case of one or the other," he said, adding that it's important to address both types of threats in risk management planning.

"Certainly, we find that data breaches are often the result of negligence," said Avivah Litan, an analyst at Gartner Inc.

Examples cited by Litan include not changing passwords or using weak passwords, along with a tendency on the part of individual users to leave log files or sensitive data lying around unprotected. ▀

Microsoft Tries to End Search Also-ran Status

Offers incentives to corporate users, seeks mashup apps for Live Search

BY ERIC LAI AND JUAN CARLOS PEREZ

In an attempt to boost its disappointing share of the search market, Microsoft Corp. has started giving financial incentives to large corporate customers that use its Windows Live Search engine internally.

Microsoft also hopes to cut into Google Inc.'s search lead by encouraging Web developers and other programmers

to create mashups — quickly assembled programs gluing together different data sources — that leverage Live Search and its Virtual Earth mapping and location service.

The incentive program is being tested with "a select number of enterprise customers based on the number of Web search queries conducted by their employees via Live Search," Microsoft said in an

e-mail statement last week.

The company added that it is giving the participating companies "service or training credits" in exchange for their usage of Live Search.

Microsoft needs to try something. Earlier this month, UBS Investment Research said Microsoft has been losing ground to both Google and Yahoo Inc. in online search revenue and the number of queries being processed.

At Microsoft's 2007 MVP Global Summit in Seattle last week, Chairman Bill Gates acknowledged the company's search difficulties during a Q&A session with attendees.

"We're No. 3," he said. "It's not a position we're used to

being in, so clearly it's a trend we're committed to reverse."

Microsoft is investing heavily in its core search technology and in extra services, such as one for giving users rebates from merchants they find via Live Search, Gates said.

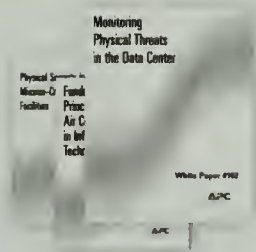
Robert Bogue, a Microsoft Most Valuable Professional from Indianapolis, said he sees some promise in Microsoft's strategy. Bogue uses Google to do most text searches, but he said he prefers Virtual Earth's ability to show 3-D views of mapped locations over the flat, top-down views of other mapping technologies. ▀

Perez writes for the IDG News Service.

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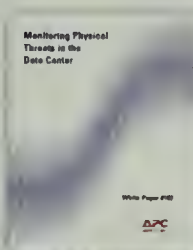


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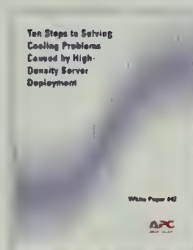
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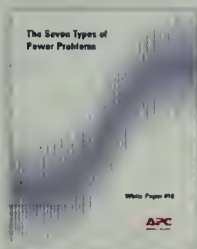
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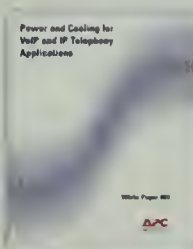
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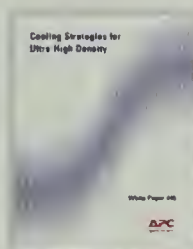
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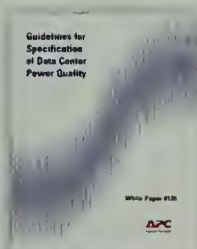
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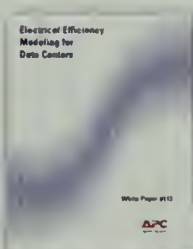
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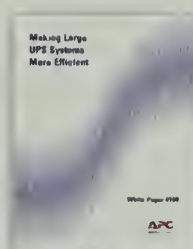
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Notes Backers Hope Upgrade Ends Its Ugly-Duckling Days

Redesigned user interface is a big step forward for IBM, testers say

BY ERIC LAI

TECHNOLOGY consultant John Head isn't spilling any big secrets when he says, "Most people think Lotus Notes is ugly."

Head is a Notes architect at PSC Group LLC in Schaumburg, Ill. More than a few times, he has watched a client — a newly merged company, for instance — wrestle over whether to standardize on IBM's Notes and Domino or Microsoft Corp.'s Outlook and Exchange for employee e-mail. And he said he has seen the decision come down to the company's CEO "saying that he doesn't like the way Notes looks."

Such examples are one of the reasons why Head and other members of the Notes faithful are so upbeat about IBM's Notes 8 upgrade, which is due around midyear. IBM released the first public beta of Notes 8 and its Domino 8 server counterpart on March 9 and announced the beta launch last week. Company officials said the e-mail client's user interface has been "reinvented" from the ground up.

"This is not your father's Notes," said Ken Bisconti, vice president of Lotus messaging and collaboration products at IBM. At the same time, he added, one of the strengths of Notes — its legendary backward-compatibility — won't be compromised. Companies will still have "complete investment protection," Bisconti said. "All your old Notes apps will work."

Major new features include the ability to view and compose files in the OpenDocument format directly within

Notes. The new version can also detect the online presence of co-workers or friends who are on the instant messaging buddy lists of users, enabling them to send messages from within Notes via IBM's Sametime IM software. In addition, Notes 8 can be used to view RSS feeds.

The upgrade also includes numerous user interface tweaks, such as the use of colors to denote different e-mail senders, the ability to add contacts by dragging and dropping their e-mails, and support for sorting messages by subject threads, a la Google Inc.'s Gmail service.

Chris Whisonant, a senior systems administrator at Com-

porium Communications, a telecommunications service provider in Rock Hill, S.C., said the increased functionality in Notes 8 means the software uses more RAM than before. But Whisonant said Notes 8 "is easy to get used to because you just like using it more."

Achilles' Heel No More

The user interface changes should help turn what remained an Achilles' heel in Notes 7 into a strength, said Nathan Freeman, a consultant at Lotus 911 Inc. in Kennesaw, Ga.

"The in-box is totally rethought, and there's extensive improvements to every aspect of presentation and usability," said Freeman, who, like Head,

has been using Notes 8 for the past six months and giving IBM feedback. Lotus 911 has already deployed the new software to all its employees.

Head was even more emphatic about the improvements in the new-look Notes. "When I show Notes 8 to people, they say, 'Wow! That can't be Notes,'" he said. The software's design, once "very clunky," has been updated so that it's clean without being "Web 2.0 trendy," Head added.

He acknowledged that IBM is stealing user interface design concepts from Outlook and Gmail. But it's also taking a page out of Microsoft's playbook and embracing and then extending advances first made

Notes on Notes 8

■ The standard version of Notes 8 leverages Eclipse and AJAX and includes all new features and user interface improvements.

■ Users with less-powerful PCs will be able to run the software in a basic mode that lacks many of the user interface modifications.

■ IBM plans to release Notes 8 for Windows and Linux first; a Macintosh version is scheduled to follow a few months later.

by others, according to Head.

For instance, an e-mail threading feature in Notes 8 lets users preview messages in a thread and rearrange them to stack the most important ones on top. Head said that improves upon Gmail's threading, which lets users view messages only based on the most recent one sent or received. ▸

Outlook 2007 Users Critical of Slow Performance

BY ERIC LAI

Early users of Outlook 2007, the latest version of Microsoft Corp.'s market-leading e-mail client, are voicing widespread complaints about the software's sluggish performance.

Symptoms being reported include temporary freezes when commands are executed or windows are opened, Outlook's inability to keep up with text as it is typed, and slowness in sending and receiving e-mails.

Most of the problems don't appear to be the result of underpowered PCs or faulty or misconfigured e-mail servers. Instead, users say — and Microsoft acknowledges — the underlying cause is changes made under Outlook's hood to accommodate new features such as RSS feeds and indexing for faster searches.

Some bloggers working with beta versions of Outlook 2007 have been complaining for months. Even loyalists such as Microsoft's Most Valuable Professionals — the company's elite corps of unpaid technical helpers — are grumbling.

[Outlook 2007] hangs completely for three to seven seconds typically, and for up to 20 seconds in worst cases.

JASON CLARKE, OUTLOOK USER AND ADMINISTRATOR, WENCO INTERNATIONAL MINING SYSTEMS LTD.

"A lot of MVPs are complaining about Outlook's performance," said Paul Robichaux, an Exchange MVP who works as a consultant at 3Sharp, an IT services firm in Redmond, Wash.

Jason Clarke, who oversees the e-mail system at Wenco International Mining Systems Ltd. in Richmond, British Columbia, gets about 100 e-mails daily. On his PC, he said, Outlook 2007 "hangs completely for three to seven seconds typically, and for up to 20 seconds in worst cases, when new mail

is being downloaded."

Turning off some Outlook add-ins that he has installed "does improve matters marginally, but not nearly as much as it should," Clarke said. "The hesitation is still very noticeable — jarring, even."

Clarke works in the technical sales and marketing department at Wenco, which develops fleet management systems and other applications for mining companies. He blamed the problems with Outlook 2007 on its new e-mail indexing engine.

With the indexing capability, searches produce results almost instantly, a vast improvement over Outlook 2003. However, the process also appears to be CPU-intensive. Microsoft recommends that users put indexing on a regular schedule instead of letting it run constantly in the background.

Peter O'Kelly, an analyst at Burton Group Inc. in Midvale, Utah, said he thinks some of the sluggishness is related to Microsoft letting users

download RSS feed data into Outlook's in-box file, which is stored as a .pst or .ost file.

Adding RSS feeds can quickly swell a user's in-box file to more than 2GB of data, according to O'Kelly. He said that causes Outlook 2007 to write to the hard drive much more often than it typically would, especially when the e-mail software is running on PCs that don't have large amounts of memory.

Last month, Microsoft posted a technical help document on its customer support Web site offering advice on solving the .pst and .ost file problems. For example, it recommends that users reduce the sizes of their .pst and .ost files by deleting e-mails and splitting up large files into smaller ones while archiving older messages.

Asked whether any fixes would appear in Outlook 2007's first service pack release, a Microsoft spokeswoman said that the company "is definitely looking at how to fix this issue" but otherwise declined to comment. ▸



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BRIEFS

Juniper Execs Quit After Restatement

Two executives resigned from Juniper Networks Inc. just days after the firm restated financials following an investigation into stock option practices. Robert Dykes, chief financial officer, and Robert Sturgeon, executive vice president of the service-layer technology group, quit March 12, according to documents filed with the U.S. Securities and Exchange Commission. The documents said the resignations were "in connection with the ongoing review of the company's growth plans and requirements to achieve desired scale."

Microsoft Issues 'Nonsecurity' Patches

Though Microsoft Corp. did not unveil any new security fixes on last week's Patch Tuesday, it did push out four patches it deemed "nonsecurity, high priority," including the usual monthly revamp of the Malicious Software Removal Tool and new signatures for the Outlook 2003 and Outlook 2007 antispy filters.

SEC Charges Former Nortel Executives

The SEC has filed fraud charges against four former Nortel Networks Corp. executives: Frank Dunn, who was CEO and CFO; Douglas Beatty, CFO and controller; Michael Gollogly, controller; and MaryAnne Pahapill, assistant controller. The SEC accused the executives of twisting accounting practices to make it seem that Nortel was meeting Wall Street expectations.

Trend Micro Acquires Security Tool

Trend Micro Inc. has bought antispyware tool HijackThis from Merijn Bellekom for an undisclosed price. The freeware tool lets users create a log file of text and registry settings to pinpoint spyware, which they can then eradicate. Trend Micro plans to offer HijackThis beta Version 2.0 from its TrendSecure.com security portal.

ON THE MARK



SOA Testing Goes Beyond . . .

... Web services. Or it should. That's the view of Chief Geek John Michelsen, the top technologist at iTKO Inc. in Dallas. He reminds anyone who will listen that while service-oriented architecture (SOA) is associated with Web services, the technologies are not interdependent. "Web services are, after all, middleware," he says, adding, "SOA can be built without Web services." He points to SOA applications built using CORBA, enterprise service buses and other technologies. As such, SOA quality assurance tools should go beyond testing WSDL, SOAP, XML and the rest of the Web services alphabet soup. Michelsen says with some glee that SOA apps "can be a heterogeneous, complex mess" involving a mix of Web services and other middleware that can stump traditional or Web-services-only testing processes. LISA, iTKO's wizard-based testing software, models how an SOA should perform — regardless of how it's built — and evaluates the effects of the different services within the application. Michelsen says LISA gives QA engineers a single tool to analyze and stress-test an SOA app, no matter what the mix of middleware involved in its construction.

\$18.4B

SOA market in 2012, predicts market research firm MindBranch.

\$5,000. A Web-services-only version is free online.

SOA standards should embrace . . .

... the world of continuous events.

Not everything in life happens in a steady stream of synchronous actions. So, why should software standards? John Bates, vice president of products at Apama Inc., a division of Progress Software Corp. in Bedford, Mass., argues that vendor and industry groups need to create Web services standards for what he calls continuous event processing (CEP). "Composite [SOA] applications would be better if they were event-based," he contends. Bates points to an SOA trading system through which external fluctuating market data could be flowing

HOT TECHNOLOGY TRENDS, NEW PRODUCT NEWS AND INDUSTRY BUZZ BY MARK HALL

MATTHEW FAULKNER

in real time while a risk management module is calculating the impact of Buy and Sell options and a compliance program is checking on how changes to an investment strategy affect corporate and regulatory policies. Bates calls this the "new physics of computing," because instead of storing data and then querying it, you stream CEP data through policies and apply the rules in an asynchronous manner as the conditions shift. Today, there are no Web services standard methods for CEP. Bates expects that to change, but not until sometime after this year.

As software gets more complex . . .

... managing software teams gets harder, too. But starting next fall at Carnegie Mellon University's West Coast campus in Mountain View, Calif., you can begin to earn a master's degree in software engineering management. According to professor Tony Wasserman, although many universities bestow advanced degrees in software engineering, "what's missing is the entrepreneurial aspect of it." Associate Dean Diane Dimeff says CMU West polled hiring managers in large and small companies, vendors and end users alike, who said they desperately needed software developers who could imagine worlds beyond coding and "think like marketing, finance and other people in the business." Wasserman adds that technologists must



BATES: CEP needs to be part of Web services standards.

also look beyond the latest programming fad, be it SOA or agile development, and "re-view software methodologies and decide which is best for the company and its culture." A boon for business, sure, but Dimeff also points to the dandy boost an advanced degree can give your career. Wasserman says the curriculum is practical, with students engaged in team-based projects. Dimeff recommends applying early.

IT feeds operations with data . . .

... and it's time to get some in return. Despite the amount of information IT systems pour into operations — from supply chain systems to CRM data — users know precious little about what's happening on the manufacturing floor, observes Brian Culler, chief



CULLER: Get data back from operations systems.

technology officer at San Francisco-based Arch Rock Corp. He argues that's because operations systems mostly run on proprietary networks. But if they

used the industry-standard Internet Protocol, that might change. And Culler hopes that will happen with the arrival next quarter of the Arch Rock Primer Pack/IP. Now in beta, the tool is based on the IEEE 802.15.4 standard for low-power wireless communications. That means data from sensors on the manufacturing floor can now flow over your IP-based corporate network and more easily be included in other IP-based applications. Plus, you can use the same IP security, management and monitoring tools used elsewhere. Culler brags that the tool will make "low-power devices first-class citizens of the enterprise intranet." Pricing starts at \$4,995. ▀

JUNE 1

Deadline to apply for master of software management program at Carnegie Mellon's West Coast campus.

BRIEFS

Microsoft Files New Trademark Suits

Microsoft Corp. has filed two new lawsuits against groups it has accused of registering domain names that are similar to certain Microsoft trademarks. The company filed a suit against Maltuzi LLC for allegedly registering large blocks of domain names that included some similar to Microsoft brands. The second lawsuit was filed against 54 unnamed individuals for cybersquatting. Microsoft also said it has settled three similar suits.

HP Updates PCs To EPA Standards

Hewlett-Packard Co. has tweaked three of its computers to qualify for the U.S. Environmental Protection Agency's Energy Star 4.0 label. The move comes just four months before federal regulators apply stringent new efficiency standards to desktop PCs. The HP Compaq dc5700, dc5750 and dc7700 can now switch into sleep or idle modes faster than existing models and use an 80%-efficient power supply compared with the current 65% to 75% efficiency.

Cisco to Purchase NeoPath Networks

Cisco Systems Inc. has acquired file-area networking company NeoPath Networks Inc. for an undisclosed sum. Cisco will add NeoPath's technology into its Service-Oriented Network Architecture. The technology will establish a tighter link between file-based data and network acceleration, Cisco said.

Microsoft Updates Windows Server OS

Microsoft has quietly released what it calls a major update to its server operating system. Service Pack 2 is designed to make Windows Server 2003 more stable and secure. The update has been in beta since November and was tested by twice as many users as Microsoft's previous Service Pack 1 update, which was released in March 2005.

Calif. CIO Steers Clear of Ideology on File Formats

Kelso says state is looking at document choices 'as a straight business decision'

BY CAROL SLIWA

IN LATE FEBRUARY, a California state assembly member proposed a bill that would mandate the use of open, XML-based document file formats by state agencies. That made California the third state in which such legislation has been introduced so far this year. In an interview at Computerworld's Premier 100 IT Leaders Conference in Palm Desert, Calif., this month, California CIO **J. Clark Kelso** said state officials are trying to view the issue of using open file formats "as a straight business decision," not an ideological battle. Excerpts from the interview follow:

Are open document formats the most critical issue for you, or is it more important for the state to get to open-source software? We don't view this in California as some sort of ideological struggle between big, competing visions of the future. We're trying to view it as a straight business decision. What are the costs associated with one approach over another? Does it serve all of our business needs? If it doesn't serve a business need, how do we satisfy that business need? We're trying to view this just as a plain-vanilla, nonpartisan, nonideological issue.

I feel like I have to say that, because in the open-source community, there's a little bit of the ideological approach. It's part of their community-building experience. Open documents is a little bit different from that, particularly when you bring in concerns that the government has about preserving, on a 100-year basis, archival information. We have to take a serious look at what is in the state's best interests.

Belgium's national government plans to adopt the OpenDocument format, but one IT executive there told me it couldn't do so without ODF plug-ins for Microsoft Office.

Do you feel the same way? Our installed base of Office right now is so huge, we could not just overnight or within the course of one year make that sort of a transition. If we're going to move in a particular direction, we have to be thinking about how we transition to that new state [in] three, four or five years. It may be that in

Governments often have more-limited alternatives because of laws requiring them to provide software that is accessible to people with disabilities. Are you over a barrel there? A little bit over a barrel, although governments are not 100% compliant right now with [Americans With Disabilities Act] requirements. We are definitely going to bring ourselves into compliance [with] all of our applications — the way we present documents to the public and the way our own employees use them. That's going to be a continuing struggle. It is something that the open-document, open-

or to any governor, "If you adopt this technology, suddenly you're going to save a lot of money." Who knows? What I think it does provide is flexibility, and that's what we need. We've got so many different departments, and the likelihood of us ever adopting a single standard at the state-wide level is pretty remote. What I'm interested in is flexibility for those departments to do their jobs individually [and] interoperate with everybody else.

Do you think the potential movement of governments to ODF will have a trickle-down effect beyond the public sector? It can, because we're a big enough market. We can provide to the people who are innovative [with] ODF, or open source, a market and some revenues and a business model that keeps them going. [But] overall, we don't coordinate our activities. I can't coordinate in California by itself.

But I do think if collectively we all emphasize we're open to alternatives, that can encourage people who are out there thinking of the next brilliant idea. I know from talking to the venture capitalists in Silicon Valley that those people are out there. I want state government to be one of the things they think about, that maybe there's a market there.

Have you considered using an online office suite, such as Google Apps? I've formed a committee that is going to look at that issue for smaller departments. It may satisfy all of their business needs. California state government is huge, but once you go down below the 15 largest departments, I've got 45, 50, 60 departments that are pretty small. I suspect there are going to be a lot of people looking for alternatives. That's what drives competition. ▶

“We’re doing what we can to break from that cycle of essentially vendor lock-in associated with proprietary systems.”

**J. CLARK KELSO, CIO,
STATE OF CALIFORNIA**



the interim, we have to adopt something that is transitional. But I frankly see this as still a very fluid issue in the marketplace. I don't know that I need to make a decision today.

Right now, with the introduction of [Windows] Vista, it's a little window of opportunity to try to step back and re-evaluate a little bit. I do have a concern about how long we will be able to maintain and use our existing Office suite. But the history has been, so long as customers push back — and I think on this one, we're going to see some push-back — Microsoft will end up having to support the existing base of Office users for quite some time. There are alternatives right now in the marketplace, and that's going to keep Microsoft honest.

source people need to be focusing on, because we've got a requirement.

Do you have any preference between ODF and Microsoft's Office Open XML file format? No. Certainly we're moving toward things that are more open. We're doing some service-oriented architecture. We're doing what we can to break from that cycle of essentially vendor lock-in associated with proprietary systems. There has to be interoperability.

In theory, open, XML-based formats can free customers to switch office application suites and possibly save money. Do you see that as one of the main benefits of moving to open formats? A little bit. [But] I never want to say to any legislator

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Continued from page 1

Integration

Sandy Clifford, director of market technology and information management at Greater Twin Cities United Way in Minneapolis. The nonprofit organization uses Microsoft's Dynamics GP 8.0 and CRM 3.0 applications and wants to link them more closely to corporate donors' systems to share information as part of fundraising campaigns, Clifford said.

Noting that the CRM soft-

ware can easily share data via XML, Clifford said she hopes it will be the integration model for the rest of the Dynamics applications. But she added that Microsoft's explanations of its service-oriented architecture (SOA) strategy have been vague. Clifford said she wants the company to explain what it's doing "in more practical technical language."

SOA Strategy

At the conference, Microsoft executives highlighted steps they're taking to make the different applications in the Dynamics line more extensible through the use of SOA technologies and middleware such as the company's SharePoint Server collaboration platform.

During a keynote speech, Satya Nadella, corporate vice president of Microsoft's Business Solutions Group, noted that the company has begun embedding Web services interfaces into its applications.

"We wanted to make sure we support SOA out of the gate for all of our products," Nadella said. "We did that, and now we're seeing customer case studies where there are real-world benefits to

Microsoft Sticks With Separate ERP Apps

SAN DIEGO

MICROSOFT EXECUTIVES last week made it clear that any plans the company had to move to a common code base for its Dynamics applications have been postponed indefinitely. But they also downplayed the notion that the software vendor has backtracked from its road map for pulling its four ERP product lines more closely together.

Two years ago, at Convergence 2005, Microsoft announced a two-phase integration initiative that was originally called Project Green. The first phase was scheduled to conclude this year and deliver a common user interface based on desktop products such as Outlook.

The expectation was that in

2008, Microsoft would begin to merge the applications around a single code base, retaining what it deemed to be the best features from each suite. But Tami Reller, corporate vice president of business solutions marketing at Microsoft, said last week that there were never formal plans for a big-bang development project to meld the different applications.

The company is centralizing some of the development work that is done on the applications and making changes to their code bases where it makes sense to do so, Reller said. But, she added, "we're not going to converge the applications for convergence's sake."

Microsoft quietly repudiated its plans for a single code base

a year ago but didn't adequately publicize the decision, said Joshua Greenbaum, an analyst at Enterprise Applications Consulting. Company officials were concerned that customers wouldn't buy new applications while waiting for the converged products to become available, Greenbaum said.

The idea was to merge the applications, said Sandy Clifford, director of market technology and information management at Greater Twin Cities United Way. But she's confident the various applications will eventually be pulled together.

"At a technical level, it's about the Microsoft products connecting in a seamless way," Clifford said. "That's what is in the game."

— MARC L. SONGINI

Integration Mandate

Microsoft announced the following integration-related offerings at Convergence 2007:

Dynamics Sure Step: An end-to-end application implementation methodology, with a set of associated deployment tools

Real World SOA: An integration framework that uses XML and Web services to tie Dynamics applications to legacy systems

Dynamics Client for Office and SharePoint Server: A bundle of self-service applications with access to Dynamics ERP data

having done that."

Microsoft also offers other integration technologies, such as its Windows Workflow Foundation, for use with the Dynamics software, according to Microsoft officials. Workflow Foundation is a set of tools designed to enable companies to create seamless business processes internally

and with external partners using SOA as well as content and document management technologies.

Microsoft is at least making an effort to improve its integration support, although it should have more tools to offer at this point, said Bob Castle, CIO at Roland DGA Corp., an Irvine, Calif.-based distributor of printing products that runs Dynamics GP 9.0 and CRM 3.0.

According to Castle, Workflow Foundation won't be supported in Dynamics GP until the release of Version 10.0, which was formally announced last week and is scheduled to ship in June. Similarly, he said he was told that the workflow tools won't be supported in Dynamics CRM until Version 4.0 of that product becomes available, which is expected by year's end.

Better integration capabilities are a must, Castle added. "The applications are feature-rich but have to go across the enterprise," he said. For example, Roland DGA has a list of 50 different business processes that it wants to automate. But, Castle said, doing so would require linking the Microsoft applications to other systems within the company.

Joshua Greenbaum, an ana-

lyst at Enterprise Applications Consulting in Berkeley, Calif., said users are pressuring Microsoft for better integration tools because it has started selling the midmarket-oriented Dynamics applications to larger customers.

"The Dynamics base has largely been insulated from complex application integration," Greenbaum said. "As Microsoft moves up into the enterprise, they have to say that they've put this integration stuff into their stack and that it's cheap and easy to use."

Further increasing the pressure on Microsoft is the fact that SAP AG and Oracle Corp., its two main rivals in the corporate applications market, are aggressively pushing their own lines of middleware tools as central elements in their respective product offerings.

Although Microsoft has been releasing integration technologies, they're more "building blocks" than easy-to-use links at this point, said Richard Apgar, a vice president at Advanced Electronic Solutions in El Cajon, Calif.

Apgar said Microsoft needs to deliver on its integration promises. "They're good at the proposal — but don't leave us at the altar," he said. ▀

IBM Overhauls Its BI Strategy

BY HEATHER HAVENSTEIN

IBM LAST week overhauled its approach to business intelligence by adding analysis capabilities to its data warehouse and unveiling BI appliances for small and midsize companies.

The new strategy, dubbed dynamic warehousing, is described by IBM officials as the "third generation" of data warehousing; query and reporting represented the first phase, and online analytical processing the second.

Dynamic warehousing aims to analyze business data in real time and enable companies to embed analytics capabilities into corporate business processes, said Marc Andrews, IBM's director of data warehousing.

The new version of IBM's DB2 Warehouse and a new OmniFind Analytic Edition tool are core pieces of the strategy, Andrews said. The analysis tool is used to mine and analyze data in the DB2 Warehouse, he noted.

The updated DB2 Warehouse, based on the DB2 9 database, can also be used with IBM's Information Server data integration software for data quality and transformation tasks.

Ed Peabody, director of technical consulting at Omnium Worldwide Inc., said he is interested in looking at the updated DB2 Warehouse because of its ability to integrate with Information Server. Omaha-based Omnium will be upgrading to a production ver-

sion of DB2 9 in August.

"Rather than me having to do data integration between [extract, transform and load] processes and build that semantic integration layer [for] reporting and analytical tools," the IBM tools are integrated out of the box, Peabody said.

Omnium plans to use an ETL tool from Business Objects SA with DB2 9 but may opt to replace it with Information Server, he said.

IBM last week also introduced two new configurations of its Balanced Configuration Unit (BCU) data warehousing appliance. One is built for midsize companies, and the other is aimed at small businesses, IBM said. Earlier versions of the appliance were configured only for large customers. ▀

The Highly Reliable Times

VOLUME 1 – ISSUE 2



Windows Server® 2003



WINDOWS SERVER TAKES CHECKERED FLAG OVER LINUX



Tom Nagy for The Highly Reliable Times

THE CONTIDROM, CONTINENTAL AG's storied test track located near Hanover, Germany.

BREAKING NEWS:

"Windows Server provides a reliable environment with centralized administration and management. Duplicating this level of service in a Linux-based environment would have been very difficult."

— Paul Schwefer, CIO, Continental AG



New System Gives Global Automotive Supplier 99.9% Reliability

By MICHAEL BETTENDORF

HANOVER, Jan. 2007 — "We needed rock-solid reliability, and we weren't getting it from our legacy infrastructure," says Paul Schwefer, CIO at Continental AG, one of the world's largest automobile suppliers with over 85,000 employees worldwide. Inadequate management tools made it difficult for Schwefer's team to keep system uptimes at the high levels expected at Continental AG, so a change in platform was necessary.

Initially, a Linux solution was considered. However, after a thorough evaluation, Schwefer's team determined that Linux could not deliver the reliable, predictable environment Continental AG required. Instead, they chose to use Microsoft® Windows Server® 2003.

With key features of Windows Server 2003 such as

group policy management, Schwefer found clear advantages over a Linux-based solution. "Windows Server provides a reliable environment with centralized administration and management," said Schwefer, who believes that superior manageability leads to high reliability. "Duplicating this level of service in a Linux-based environment would have been very difficult and more costly," he says.

The decision has proven successful: Since the implementation, Windows Server 2003 has provided 99.9% reliability in a distributed environment for Continental AG. For the full Continental AG case study, plus other case studies and independent research findings on the reliability of Windows Server versus Linux, visit us online at microsoft.com/getthefacts

BREAKING NEWS: Reliability linked to cheerfulness in IT professionals

In a trend with global implications, IT professionals such as Continental AG's Paul Schwefer (pictured at left) show obvious signs of exuberance.

— Continued on Page B3

Time Change Goes Forward Without Major Disruptions

Most systems keep ticking after early start of DST, IT managers say

BY TODD R. WEISS

THE EARLY switch to daylight-saving time (DST) on March 11 appeared to arrive without major troubles for IT operations. But many staffers stayed up late to carefully monitor the time change in data centers. And a Gartner Inc. analyst said some companies had to make fixes manually in order to beat the clock.

According to reports from IT managers and workers after the change took effect, system glitches were few, and the ones that did occur were minor.

For example, Michael Leonhardt, an infrastructure architect at Building Materials Holding Corp. (BMHC) in San Francisco, said staffers found a time-related problem on an internal log-viewing application that uses an embedded version of Sun Microsystems Inc.'s Java Runtime Environment. The issue went undetected during testing, Leonhardt said. "Other than that, everything went smoothly," he added.

But the DST conversion work wasn't easy, according to Leonhardt. The effort took its toll on BMHC's operations, he said, noting that the IT team at the supplier of building materials and home construction services had "to stop work on business initiatives and projects to divert the necessary resources" to DST work.

Online auction house uBid Inc., which relies on correct time stamps for the thousands of auctions and buy-it-now sales it processes daily, didn't experience any IT-related problems after the clocks were turned ahead.

"We made it just fine

through the daylight-saving time transition, and the world hasn't ended," Sally Dahl, vice president of customer and seller operations at Chicago-based uBid, said via e-mail.

Dahl attributed much of the success of her company's DST preparations to patching and maintenance work that was done for uBid by Rimini Street Inc., an IT services firm that provides support for some of Oracle Corp.'s applications.

The switch to DST, which used to occur during the first weekend in April, took place early this year because of federal changes aimed at reducing energy costs. The earlier start and a one-week extension of DST in the fall were signed into law in August

2005. But many vendors didn't release patches for their products until the past few months, leading to a last-minute scramble within IT departments.

Steve Cooper, CIO at the American Red Cross, said in an e-mail that the Washington-based humanitarian agency's detailed DST preparations over the past several months paid off by preventing all but two minor problems.

"All six of the organization's core mission-critical systems and 50 related applications are in good stead," Cooper wrote. He added that the IT team focused primarily on those systems before the time change, leaving some less-critical systems until afterward (see story below).

“We made it just fine through the daylight-saving time transition, and the world hasn't ended.”

SALLY DAHL, VICE PRESIDENT OF CUSTOMER AND SELLER OPERATIONS, UBID INC.

The two issues that needed tending to after the switch involved a laboratory database that wasn't fully configured and a password-protected backup site, Cooper said.

Gartner analyst Cameron Haight said that as the DST deadline neared, preparations at many companies took eleventh-hour detours because

time was running out. In several cases, Haight said, that included giving up on attempts to install software patches and instead manually changing applications' time settings.

One problem with the whole process, Haight said, was that lawmakers didn't fully recognize the consequences of the DST change. Even now, he noted, Rep. Edward Markey (D-Mass.), who co-sponsored the measure, has information on his Web site that makes the change sound like a minor issue for users.

"The site says to 'point your browser to the Microsoft patch and download it,'" Haight said, describing that as too simplistic for corporate data centers.

A spokesman for Markey said prior to the time change that the congressman realized that the DST changes were "not a simple change" for IT departments. But, the spokesman said, "the energy-saving benefits are worth the changes." ■

Red Cross Pumped IT Resources Into DST Work

PLATELETS THAT HELP blood to clot have only a five-day shelf life, so every hour counts for the American Red Cross during the process of collecting, storing and distributing them.

As a result, the Red Cross couldn't afford to have any hitches with the time stamps and other time-related settings in its systems when daylight-saving time started three weeks earlier than it had in past years.

To make sure its systems worked properly after the time change took effect, the nonprofit agency began grappling with the DST issue late last year. In mid-January, in the midst of the conversion effort, it hired a new chief technology officer, Nida Davis Roemer, who previously was chief enterprise architect at the Federal Reserve. Her first major task at the Red Cross was the time change.

With an internal DST readiness assessment in hand, Roemer set up a 16-person team to oversee all aspects of the conversion work. The team included a project manager, a systems architecture specialist, a lead engineer and a risk management officer, among others.

The team met twice a week to

review the progress being made. Roemer met with the project manager every morning for updates and spoke with team members by phone at the end of each workday. "This was very helpful because of the level of complexity of the project," she said.



ROEMER: Fixing JRE apps was no easy task.

The Red Cross has a wide assortment of hardware and software that needed to be reviewed, updated and tested, and there were also compatibility and interdependency issues to contend with. Roemer said some of the DST team members and other IT workers occasionally slept in the agency's data center while working nights and weekends on the conversion effort.

The agency identified six core applications that had to be updated before the time change, along with another 50 related applications that were deemed to be mission-critical. The six core applications included a national blood-tracking system

and programs that the Red Cross uses to collect blood-testing results, maintain records from blood drive donations, handle case management during disasters and process its e-mail.

Altogether, the agency has about 200 applications in use, and 158 of them needed remediation, said Roemer. The biggest challenges involved the e-mail servers and applications that are based on the Java Runtime Environment. She said the JRE applications were complicated "because there are so many different versions" of the Sun Microsystems software that required updating.

Meanwhile, IT workers had to fix 168 e-mail servers running Microsoft Exchange Server 2003. Updates to 162 of the systems went well, but six had problems that were still being investigated by Red Cross staffers last week. "We had mixed results," Roemer said.

To provide information about the DST project to the agency's 35,000 employees and 1 million volunteers, the IT team built a Web portal that uses Microsoft SharePoint collaboration software. Content available on

the portal includes tutorials showing how users can update their own systems in local offices.

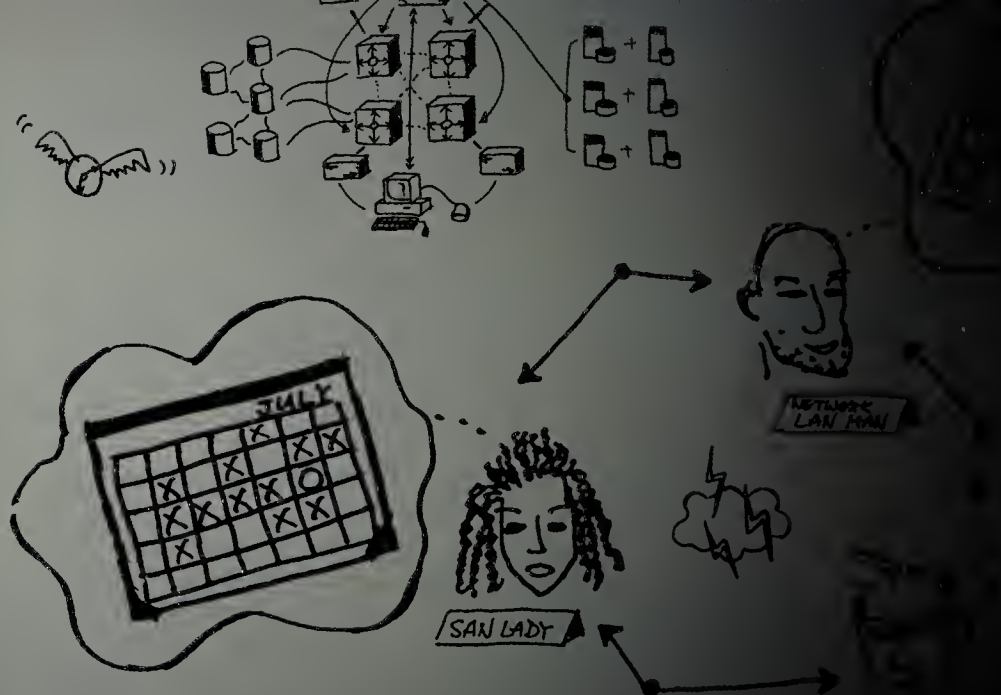
Another important tool was an Excel spreadsheet nicknamed "the Dig" that provided a view of every server by name, number and location. It also listed each operating system, database, application and piece of hardware used by the Red Cross, as well as the interdependencies between them. "Every component we needed to take care of was on the Dig list," Roemer said.

Two weeks ago, as the deadline drew near, the DST team was forced to bring in additional people from within IT to get the compliance work done — or else face the prospect of shutting down applications during production usage times. That wasn't an option, according to Roemer.

The time change doesn't end the agency's DST-related work. The Red Cross also has created a mobilization plan to help it deal with the switch back to standard time, which will start on Nov. 4 — one week later than in previous years.

"It will be a regular IT item for us to track for future DST changes," Roemer said.

— TODD R. WEISS



SERVER NAME: production
 MAC ADDRESS: 00:14:51:8e:af:f2
 WWN: ?
 IP ADDRESS: 10.10.2.1

- 17. 235. 178. 48
- 17. 235. 249. 52
- 17. 235. 169. 27
- 17. 235. 246. 73
- 17. 235. 120. 54
- 17. 235. 242. 31



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AJAX Builds Shippers Better Search Engine

Scheduling service looks to expand listings, speed searches for ships

BY HEATHER HAVENSTEIN

OCEANSCHEDULES.COM, whose online service lets shippers search through worldwide commercial ocean carrier schedules, has launched an AJAX-powered Web site in an effort to ease the process of finding available ships to carry containerized freight.

Harry Sangree, managing director of OceanSchedules.com, said the Parsippany, N.J.-based company turned to Asynchronous JavaScript and XML technology because it promised to significantly boost the performance of its Web-based service. AJAX-based Web applications don't have to refresh a page every time a user enters or receives new data, he noted.

In addition, Sangree said, "we realized we needed to have cool technology to attract users to stop what they are

doing now and to switch" to OceanSchedules.com's site.

The new site was born last month as a piece of an effort by OceanSchedules.com parent firm Intrta Inc. to expand the content on the site and thus boost its user base, said Sangree.

Intrta builds software that manages booking, scheduling, cargo tracking and other functions for ocean shipping firms.

OceanSchedules.com's previous site had let users search only the schedules of ocean shippers that paid to be listed on the site, a method also used by competitors' sites, Sangree said. To augment that process, users had to search through multiple portals, comb through paper-based schedules and/or call individual carriers to get complete worldwide timetables, he said.

OceanSchedules.com last May began the effort to create a site that could provide what

Sangree called an Expedia-like service for the containerized freight industry. The planned site would include the sailing schedules of all global carriers and could be easily searched, he said.

The new site is supported by advertising so that its listings are not limited to paying customers, Sangree explained.

The need for the new capabilities may seem straightforward, Sangree said, but the complexity of ocean carrier schedules makes the job of creating such a site very difficult.

For example, he noted that for one week in March, a shipper could choose from 95 different sailings operated by 12 different carriers for the commonly traveled route of Singapore to Hong Kong. Changing a variable with that number of choices would require too many page loads using an HTML-built site and would frustrate users, Sangree added.

The company first

tried to build an AJAX-based prototype site internally using open-source development tools, but it performed inadequately when accessed from overseas, Sangree said.

Next, it hired JackBe Corp. in Chevy Chase, Md., to build a site using its NQ Suite of AJAX tools, Sangree said. The NQ tools, now known as Presto Studio, consolidated the number of calls back to the server from areas such as Taiwan, Vietnam and Malaysia and helped solve the performance problem, he said.

"[JackBe's] environment created an application that runs fast anywhere," he said. "The distance factor doesn't kill

you like it did with the public-domain tools."

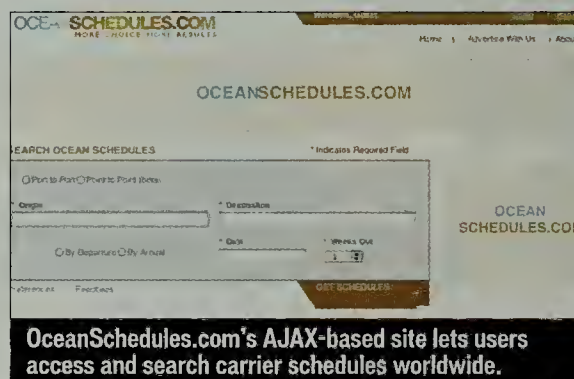
The site built by JackBe contains myriad filtering options that allow users to quickly search the 5 million voyage records in OceanSchedule.com's database, according to Sangree. Users can filter data by the day of the week, transit time or carrier, he said.

Since its launch six weeks ago, over 16,000 new users have tried the system, he said.

Jeffrey Hammond, an analyst at Forrester Research Inc., said that many organizations like Intrta are finding that AJAX enables them to provide access to massive amounts of data that have never been

available on the Web before.

OceanSchedules.com "could have had HTML pages and tables and had people navigate through that, but then customers wouldn't have found much use of that and would have been frustrated," he said. ▀



IBM Softens Focus on Using Linux PCs

BY ELIZABETH MONTALBANO

As vice president of worldwide Linux and open-source operations at IBM, **Scott Handy** is one of the main public faces behind the company's strategy for technologies such as Linux and Eclipse. Handy spoke with the IDG News Service at the LinuxWorld Open Solutions Summit in New York last month about the status of IBM's own Linux deployment and other issues. Excerpts from the interview follow:



the internal rollout going? What we learned was that it actually was going to be a problem for our support group — our help desk — to have a different set of software on the Linux side than they did on the Windows side. We needed to standardize on a single programming model for the two environments, and Eclipse turned out to be the most robust cross-platform environ-

ment that we came up with. By rewriting Notes and Sametime, I think we've achieved with the Open Client exactly what we needed. [Editor's note: Open Client is desktop software that IBM introduced last month.]

So for a while there, we really had to slow down [on Linux]. And now the big drive within

IBM is to get everybody on Open Client. There's less concern about which OS you're on. We don't have a target [for Linux], but I expect Linux usage will go up. IBM Research seems to prefer Linux. The China Development Lab prefers Linux. We have whole geographies that seem to have at least a slightly greater inclination for Linux than other areas do — like Brazil and India.

IBM has said it would be even-handed in supporting both Red Hat Linux and Novell's SUSE Linux for customers. What about supporting other Linux distributions? Overall, our strategy is to support two or more Linux distributions. In the very beginning, in '99, we had four: Turbolinux, Caldera, SUSE and Red Hat. Over time, the

business has consolidated — certainly on the server. Over 90% of the servers now ship with Red Hat or Novell SUSE.

[But] our Linux strategy allows us to support an additional distribution. So if somebody gets a big share — which is basically saying, if our customers start buying and demanding another Linux distribution — we would do so. And we have done so in certain geographies. We support Asianux in Asia.

What's your position on the joint development and licensing deal Novell and Microsoft signed last fall? Has Novell lost some of its Linux credibility? Our perspective is that it's an interesting deal. Different customers have different perspectives on it. Some customers — among the class who think that any vendors fighting is a bad thing — think that this deal is a good thing.

And yes, there are some

people in the [open-source] community who see this as partnering with someone who is anti-Linux. I think at the end of the day, the positives slightly outweigh the negatives. This is a competitive business, and Novell is doing this to get a competitive advantage. Let it play out and see where it's going to go.

Microsoft has questioned IBM's commitment to open document standards, such as the Open-Document format. What's your response? The IBM strategy is [to get] behind anything really that gets industry traction, and ODF has a tremendous amount of industry traction. We have a lot of customers and a lot of governments who are behind [ODF] and, of course, vendors. We've done our part; we've announced that Lotus Notes, and the editors that we ship with that, are ODF-compliant. ▀

In 2004, you said that you hoped to have 40,000 desktop Linux users within IBM by the end of that year. And other executives talked about the idea of moving all employees to Linux systems. How is



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GLOBAL DISPATCHES

An International
IT News Digest

Barclays Unit to Outsource Call Center

LONDON

BARCLAYS PLC's Barclaycard credit card unit has announced plans to close its customer contact center in Manchester, England, and transfer some of the jobs there to facilities in India.

The announcement comes just days after rival financial services firm Lloyds TSB Group disclosed plans to close its call center in Mumbai, India, and allow customers to directly contact local branches.

Barclaycard's Manchester center will close in July, and 630 jobs will be transferred to facilities in Mumbai and Delhi, India, and in Teesside, England.

"Decisions like these are never easy, and we will be doing everything we can to support those affected," said Barclaycard CEO Antony Jenkins. "Barclaycard's business is becoming more global, and to stay successful, we must change how we operate to reflect this."

A spokeswoman for the credit card operation denied that the move to India was strictly for financial reasons. However, she added, "it's streamlining our operations, and the organizational restructure will ensure we are able to continue to operate effectively."

■ TASH SHIFRIN, COMPUTERWORLD U.K.

China Tightening Net Access Control, U.S. Says

SINGAPORE

THE CHINESE government took steps during 2006 to increase its control and monitoring of Internet access by the country's growing Internet population, the U.S. Department of State said in a human rights report released this month.

"While the government continued to encourage expanded use of the Internet, it also took steps to monitor its use, control content, restrict information, and punished those who violated regulations," the report said.

The report cited several steps taken by the Chinese government,

including establishing stricter requirements for Web site registration, greater official control over content and a wider definition of what constitutes illegal activity online.

China's Internet users, estimated at 140 million by the China Internet Network Information Center, have not eroded the government's ability to control access to content it deems undesirable, said the State Department.

The report noted that "tens of thousands of persons" monitor the Internet in China. The report also said that the Chinese government has enlisted the help of domestic and multinational companies to restrict access to information on the Internet.

■ SUMNER LEMON, IDG NEWS SERVICE

Microsoft Signs First EU Protocol License

BRUSSELS

MICROSOFT CORP. earlier this month signed up the first licensee for the workgroup server protocols the European Commission ordered it to make available to competitors in a 2004 antitrust ruling.

The licensee, Aliso Viejo, Calif.-based Quest Software Inc., said it plans to use Microsoft's User and Group Administration protocol set in products based on Microsoft's Active Directory. Quest said the protocols will improve links between its products and Unix, Linux and Java authentication systems.

Quest develops software for Active Directory administration and data recovery, along with tools for application, database and server administration.

The companies signed the licensing deal on March 1, the same day the EC sent Microsoft a "statement of objec-

tions" about the prices it planned to charge vendors to license the protocols. Quest nevertheless agreed to pay the full list price — 5.25% of net revenue on the products that use the protocols, according to a Microsoft spokesman.

The EC ordered Microsoft to create the Work Group Server Protocol Program in its March 2004 antitrust ruling that found Mi-

crosoft had abused its position in the desktop operating system market. It also ordered Microsoft to pay €497 million (about \$600 million U.S. at the time) in fines.

■ PETER SAYER, IDG NEWS SERVICE

EDS to Buy Indian Software Testing Firm

BANGALORE, INDIA

ELECTRONIC DATA Systems Corp. last week agreed to acquire RelQ Software Pvt., a Bangalore-based software testing company, for an undisclosed sum.

EDS said it is looking for the privately held firm to improve its applications testing, validation and verification, and quality assurance services.

The deal is expected to close in May.

RelQ's 700 workers in India, the U.K., the U.S. and France are expected to join the EDS global testing organization.

RelQ offers testing of real-time and embedded applications for clients looking to deploy applications throughout a large organization. The company primarily targets the banking, financial services, telecommunications and consumer electronics industries.

The acquisition is the latest in a series of moves by Plano, Texas-based EDS to strengthen its position in India. EDS last year acquired a majority stake in Indian outsourcer Mphasis BFL Ltd. and then announced plans to merge its own Indian services subsidiary with that company.

■ JOHN RIBEIRO, IDG NEWS SERVICE

LogicaCMG Opens RFID Test Lab

SYDNEY, AUSTRALIA

LOGICACMG PLC this month opened an RFID-based warehouse in Sydney that it said will allow businesses to simulate and evaluate radio frequency identification projects.

Its Innovation Warehouse, adapted from a similar LogicaCMG complex in the Netherlands, will simulate warehouse and transport scenarios using forklift, handheld and fixed-mount RFID readers to demonstrate the suitability of the technology, according to the London-based systems integrator.

LogicaCMG Australia CEO Colin Holgate said the company expects that the warehouse will boost RFID adoption in Australia by allowing businesses to experiment with the technology.

■ DARREN PAULI, COMPUTERWORLD AUSTRALIA

Briefly Noted

Serco Group PLC, a Hook, England-based IT services firm, has apologized and agreed to pay any costs resulting from the theft of one of its laptops, which contained sensitive data on more than 16,000 Worcestershire County Council employees in England. The laptop held names, addresses, national insurance and bank account details of current and former municipal employees. Serco is building a new human resources and payroll system for the county.

■ TASH SHIFRIN, COMPUTERWORLD U.K.

The Chinese government last week gave **Intel Corp.** permission to build a \$2.5 billion (U.S.) chip manufacturing plant in Dalian. The plant will produce semiconductors, including microprocessors, according to China's National Development and Reform Commission. The plant will have a monthly production capacity of 52,000 wafers, it said. An Intel spokesman declined comment on the company's plans.

■ SUMNER LEMON, IDG NEWS SERVICE

Palm Inc. has announced plans to open a research and development center in Shanghai. Engineers at the facility will work to incorporate local language capabilities into Palm smart phones and to accelerate the delivery of next-generation smart phones to mobile operators, partners and customers worldwide.

■ STEVEN SCHWANKERT, IDG NEWS SERVICE

Qualcomm Inc. and Samsung Venture Investment Corp. have each invested \$8 million (U.S.) in Advanced Micro-Fabrication Equipment Inc. (AMEC), a Shanghai-based developer of equipment used to manufacture semiconductors. The investments were part of \$43 million in funding raised by AMEC since last October.

■ SUMNER LEMON, IDG NEWS SERVICE

Swisscom AG, Switzerland's largest telephone company, has offered to buy Italian Internet company Fastweb SpA for €3.7 billion (\$4.9 billion U.S.). Fastweb provides fixed-network service to more than 1 million customers in 130 Italian cities. Fastweb acknowledged receiving the offer and said it is interested but has not yet decided whether to accept it.

■ JOHN BLAU, IDG NEWS SERVICE

GLOBAL FACT

2.9%

Projected rate of growth of the information and communications technology market in Europe during 2007. The European market is projected to total €668 billion (\$887 billion U.S.) this year.

SOURCE: EUROPEAN INFORMATION TECHNOLOGY OBSERVATORY, FRANKFURT

Compiled by Mike Bucken.



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DON TENNANT

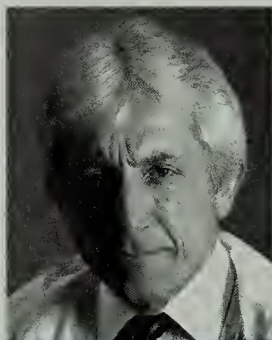
The Real Champions

WHEN *Computerworld's* Eric Lai posted an article about Microsoft's Most Valuable Professionals summit on our Web site last week, it wasn't long before accusations that we were pandering to Microsoft began to appear in the story's Comments section.

"Do you honestly believe that anyone who even demonstrates a small shred of critical thinking is going to buy the garbage in this article?" asked one reader, who called Microsoft an "atroc-ity unleashed onto the world." Another reader, whose subject line asked, "Did Microsoft buy *Computerworld* too?" chided that Lai's article was written from the perspective of Microsoft's sales apparatus.

I have no problem with readers expressing those views. For one thing, we're labeled as Microsoft bashers often enough that being hit from the other side is an indicator of balance in our reporting. I'm also confident that any fair-minded person who reads Lai's article would agree that it's a well-reported account of who these MVPs are and what they do, and that it was neither particularly favorable to nor critical of Microsoft. So I suspect that those comments were dismissed by most as tiresome rants from the crowd of all-too-conforming "non-conformists" who see Bill Gates as evil incarnate and Microsoft as his weapon of mass destruction.

I do have a problem with the mean-spirited, personal attacks that some of these people make behind a cloak of anonymity. One comment that painted Lai as a Microsoft toady had to be removed from our site because of vulgar language. Our policy is to contact the person who posted it and explain that it has to be pulled — not because of the opinion expressed, but because of the vulgarity — and we invite him to repost his comment without that



DON TENNANT is editor in chief of *Computerworld*. Contact him at don_tennant@computerworld.com.

language. In this case, we were thwarted by the fact that the person used a fake e-mail address, so we were unable to reach him.

Hiding in the shadows of anonymity is a standard operating procedure of the loose-knit corps of Microsoft haters that thrives on making these mindless, myopic attacks. It's nothing new — I remember years ago being branded as a "Bill Gates

love slave" by an anonymous Linux proponent because I dared to question the sensibility of the cult-like following that Linus Torvalds was attracting.

Now, contrast that approach with the one I wrote about in my editorial last week. I recounted the proceedings of a presentation at our recent Premier 100 IT Leaders Conference, in which Dale Frantz, CIO of Auto

Warehousing Co., had the courage to speak out against Microsoft strong-arm tactics that he found so objectionable, he's looking to convert to an Apple platform. And I wrote of how former Massachusetts CIO Louis Gutierrez spoke candidly about his fight for open office document standards and the equally objectionable lobbying practices Microsoft had engaged in to undermine those efforts.

Who, then, are the real champions of alternatives to Microsoft? These outspoken IT leaders, or the outrageous otherworld?

I'm firmly convinced that Microsoft's dominance is at least in part attributable to the recklessness and mindlessness of its most vociferous assailants. The more the voice of reason — think Frantz and Gutierrez and, say, Dan Agronow, the CTO who championed The Weather Channel's adoption of Linux — is drowned out by the perpetual buzz of fanaticism, the less likely it will be that alternatives to Microsoft are given serious consideration.

So here's a heads up for the person who used that fake e-mail address to state his case: For as long as your way of thinking represents the alternative, the Microsoft you hate so much will continue to win. ▶

Don Tennant



LAURIE ORLOV

CIOs Must Transcend Expectations

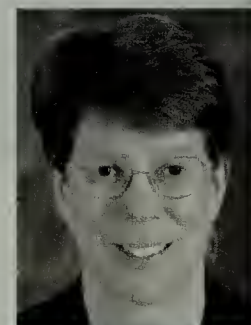
CIOs, LISTEN UP: Your boss is pleased with the job you're doing. The trouble is that CEOs don't expect a whole lot from IT.

A recent survey conducted by Forrester Research found that CEOs are generally satisfied with the role IT plays in the organization. But the study also showed that while they would like IT leadership to drive business innovation or lead process improvement, less than one-third of CEOs really expect IT leadership to be proactive in either area. And more than half of the CEO respondents said they were unimpressed with IT's ability to track and report on people and equipment assets.

The limited expectations CEOs have of IT leadership threaten to stunt IT's contributions, resulting in an IT organization that may be averse to taking risks or even rising to the level of visibility. Certainly, some of the burden of guilt lies with CEOs, who must educate

themselves about technology and the prospective value IT can deliver to the business. They must demand that CIOs take more of a leadership role in the organization, give the CIO more of a voice on the executive team and in the organization as a whole, and transform themselves into tech-smart executives who can look beyond IT fads to see the real-world technology that underpins the success of firms they admire.

If you are a passive IT executive — one whose CEO is happy but doesn't think that IT offers leadership in areas of business innovation, process improvement or asset management — you must boost your aspirations for IT's contribution. A positive initiative from you will drive an increase in your CEO's expectations of IT.



LAURIE ORLOV is a vice president and principal analyst at Forrester Research Inc. Her research focuses on CIO and IT management issues.

One thing you can do is strengthen your relationship with other business leaders in the organization. Here are three steps CIOs can take to do that:

■ **If you're resting on the laurels of the CEO's low expectations, stand up.** If the gap between high satisfaction and low expectations characterizes your company, shake off the lethargy and brainstorm with your staff about what can and should be done differently. Move IT practices and processes to a higher level of maturity and stability, making sure that IT is well connected

to business strategy and that business stakeholder relationships are well managed.

■ **If you're doing more than the CEO can see, market it.** If part of the gap in the perception of IT leadership is simply ignorance of the impact that IT is having on the business, your first task is to improve communication. Help the CEO understand IT in business terms, mapping recent business improvements to their underlying IT enablers. For example, if an IT project accelerated the speed of servicing a customer, make sure that the boss

knows and can speak knowledgeably about it.

■ **If the CEO and top executives don't understand IT, educate them.** Get on the agenda of an executive off-site gathering so you can provide an overview of IT's basic vocabulary and current capabilities — answering any and all questions and brainstorming about future possibilities. If you don't take on the task of educating the CEO and other executives about the business impact of technology, no one else is likely to pick up the slack.

It is clear that IT and business

initiatives and strategies will increasingly have to intertwine and overlap — forging a new business/technology organization and making the boundaries between business and IT more permeable. But to get there, CIOs will have to shatter stigmas associated with IT and forge stronger relationships with the top decision-makers in their organizations. ▀

WANT OUR OPINION?

More columnists and links to archives of previous columns are on our Web site:

www.computerworld.com/columns

READERS' LETTERS

Dongles Won't Cure All Password Woes

I HAVE TO disagree with Frank Hayes' assertion that USB dongles are the answer to the problems posed by the traditional password ["Passwords – Why?" Frankly Speaking, Feb. 5]. First, as someone who does some help desk work, I fail to see how each password reset could cost \$20. Hayes didn't explain how he arrived at that figure.

Also, he states that "we'll have to teach users to treat USB dongles like their car keys." If we have failed to impress upon users the importance of treating their passwords like their car keys or credit card numbers, how on earth are we going to convince them that their USB dongle is more valuable than their password? Other problems posed by USB dongles: the lack of USB ports on the front of computers, users forgetting their dongles at home (much more expensive than a password reset), users leaving them in their PCs overnight, and the dongle going through the washer and dryer.

Don Spidell

Technical support, Residential Warranty Co., Harrisburg, Pa.,
admin@donnyspi.com

USB SECURITY dongles are a great idea in theory, but they're doomed to failure in practice. The problem isn't that passwords are insecure; it's that users don't care about security. They might treat dongles like their car keys, but a lot of people lose their car keys on a regular basis. A sizable portion of users will simply leave their dongles plugged into their work computer's USB port.

I would argue that biometric security is much better — you can't misplace your fingerprints or irises — but not without problems. While you can't hack a fingerprint, you can hack the image of the fingerprint the computer is checking your finger against. And if that biometric data does get hacked (as some of it inevitably will), it would be much harder to change it and prevent further hacking. In other words, biometrics will take identity theft to a whole new level of hassle for the innocent-yet-compromised user.

Aaron Read

Technical director,
Cambridge, Mass.

THERE'S A fundamental problem with using something like a USB dongle in place of a password: By inserting a dongle into your computer, you are effectively authorizing your computer to act as you in anything it sees fit to go off and do.

Now, if you could trust your computer to only go off and do those things you asked of it, that would be fine. But in a world full of viruses, just how happy will you be when a virus uses the authorization you gave your machine to transfer money out of your bank account to some secret account in the Third World? As long as your computer isn't trustworthy, are you willing to grant it the ability to act in your stead without even asking your permission? That's like presigning all your blank checks.

At the least, any such device should require you to do something that software cannot fake to indicate your agreement. A button on the dongle that must be pushed before it lets your secrets out would be a good start. (And don't let someone

sell you on a dongle with a button that can be read only by software on the computer. That adds nothing.)

Dongles and equivalent devices can be part of a solution to some problems. They are not the solution to all problems — and they are particularly not to be viewed as a solution without first understanding just what the problem actually is.

Jerrold Leichter

White Plains, N.Y.,
leichter@lrw.com

I MUST DISAGREE with Hayes' contention that USB keys are better than passwords. It's much easier to steal a USB key than it is to steal a password.

At my company, we continually reinforce to users that passwords are personal and not to be shared with anyone, period. If a supervisor asks for a user's password, the user is empowered to say no. We constantly drum into managers' heads that all they need to do is call IT and we will get them what they need with minimum fuss. If users had USB keys, we would not be as able to control the situation. For the same reasons, we also resist the call for single log-on. With single log-on, all a ne'er-do-well would have to do is steal one password to have access to the user's entire set of data.

By requiring separate log-ons for the network, e-mail and mainframe access, we more effectively protect our data resources. Inconvenient for the user? Probably. I hear about it every day. But security isn't convenient. It's more important than that.

Larry Fugate

Senior PC coordinator, Citizens Equity Federal Credit Union,
Peoria, Ill.

Reader Welcomes Dell's Linux News

EVERY DELL laptop and desktop I've ever purchased or used has had Linux on it, installed by me and configured to use all of the devices' hardware ["Hey, Dude, Could That Be Linux on Your Dell?" *Computerworld.com*, Feb. 24]. I usually wipe Windows XP off of these devices (Windows 2000 in a VM works better for me). I would welcome any effort by Dell to improve its product line and let us configure our own computers our way, not necessarily Microsoft's way. It's high time Microsoft stopped being the sole-source vendor for operating systems.

Chris Ahlstrom

Principal analyst, ARINC Inc.,
Charleston, S.C.

One for the Wall

I HAVE BEEN in IT for over 42 years, and the Feb. 26 IT Mentor column, "25 Time-Tested Truths About IT Support," by Robert C. Anderson, was one of the best articles I've ever seen. Every company should have these up on the wall for all IT personnel to see and require all employees to read many of them.

Steven R. Fisher

Manager, Integration Test Group,
Automated Financial Systems,
Exton, Pa.

SIM: IT Is Not Just Tech Anymore

FRANK HAYES must not understand what the Society for Information Management is doing in its Future Potential in IT programs

["Time to Reinvent IT," Frankly Speaking, March 5]. FPIT is about advocacy for the college training that is needed to work in business in America. There will always be IT jobs in America, and there will always be business jobs that will use information management knowledge gained in college programs.

So, as SIM says, the focus is no longer solely on programming skills. Business and project management skills are becoming more important for the IT jobs of the future. According to a recent study released by SIM, only two of the top 10 skills needed are technical.

FPIT is a program created by SIM and Microsoft to educate students and schools on the facts surrounding the IT job market. There is an increasing demand for qualified IT workers in the U.S. and not enough skilled workers to meet the demand of the IT job marketplace.

Perhaps Hayes will join the effort to make sure that the right courses are being offered in American universities and help encourage students to take IT and business courses that will help them to lead America in a fiercely competitive, global marketplace.

John Howland

President, Seattle chapter of SIM,
North Bend, Wash.

COMPUTERWORLD welcomes comments from its readers. Letters will be edited for brevity and clarity. They should be addressed to Jamie Eckle, letters editor, Computerworld, PO Box 9171, 1 Speen Street, Framingham, Mass. 01701. Fax: (508) 879-4843. E-mail: letters@computerworld.com. Include an address and phone number for immediate verification.

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KNOWLEDGE CENTER SECURITY

Inside 03.19.07

Keeping Secrets in a WikiBlogTubeSpace World. How IT is offsetting the risk of employees in cyberspace. **PAGE 26**

IM Confidential. Instant messaging's security complex. **PAGE 32**

Opinion: Columnist Mark Hall is angry that CIOs are too timid to tackle the problem of secure messaging. **PAGE 44**



DAVID HOLLENBACH

Security for Web 2.0

**SPECIAL
REPORT**

Setting security rules
in the new Web world.

EDITOR'S NOTE

YOUR EMPLOYEES might be blogging right now, as you read this. Or visiting a wiki site, checking out MySpace or sending instant messages. Best case? Your bright, tech-savvy employees are creating and collaborating. Worst case? Those same employees are unleashing company secrets or damaging your business's reputation. It's a conundrum that pits IT security managers and their instinct to protect information against companies' desire to take full advantage of the newest technologies and attract the best technical minds.

Not surprisingly, response to Web 2.0 is as varied as companies themselves. Financial services firms, banks and other businesses in highly regulated industries tend to ban such online activities outright; others swing the other way, with few restrictions and light oversight.

But, alas, most companies fall somewhere in the sticky middle — trying their best to restrict activities that expose them to undue risk while letting their employees experience the full creative benefits of the Web 2.0 world.

Many organizations are now figuring out how to develop these custom-fit rules. Our exclusive survey of IT executives shows that just over half have already made that first effort, implementing policies to regulate employees' use of social and networking sites and instant messaging. And of those companies that do have policies in place, 76% prohibit those activities altogether.

Are total bans the right approach? For some, yes, and for others, no. In the following pages, you'll read stories about companies that have wrestled with that question and, in the process, figured out the policy that works best for them. And as these companies know, it's not just about applying a technology fix; a big part of the answer is effectively communicating those policies to employees.

In the end, as surely as you have employees, you have Web 2.0 security concerns. There's no ignoring the issues, and there's no boilerplate for addressing them, either. But we hope you'll draw a few policy ideas from the experiences of the organizations profiled in this issue.

Because as Michael Miller, Global Crossing's vice president of security, says, "If you spend all your time blocking it, people will find ways around it." ▶

Ellen Fanning is special reports editor at Computerworld. She can be contacted at ellen_fanning@computerworld.com.



WHEN THE media relations department at Global Crossing Ltd. first started planning a company-sponsored external blog last year, Michael Miller, vice president of security at the telecommunications services provider, made sure he was involved in the conversation.

"The normal reaction for most people in a security organization is, 'How do we restrict this activity?'" he says. "But we wanted to clearly articulate some guidance around blogging in terms of what the employee's responsibility is, what's permissible, what isn't. If you spend all your time blocking it, people will find ways around it."

Miller's response strikes at the heart of the corporate debate over how to minimize the security risks opened up by blogging, social networking, video sharing and other interactions that fall under the Web 2.0 umbrella. Companies are wrestling with a multitude of issues, such as whether to restrict employees from blogging on employer-owned equipment, whether to monitor what blogs say, whether to steer blogging activity toward a company-sponsored blog and how to set up parameters around these activities. There's also the question of whether to open the corporate network to the wild and woolly worlds of MySpace.com, iTunes, Flickr and YouTube.

"Sites like MySpace and YouTube are new ways for companies to get infected by malicious code — viruses or spyware — and other scams," says Arabella Hallawell, an analyst at Gartner Inc. Examples include the Yamanner

Continued on page 28

Keeping Secrets in a WikiBlogTubeSpace World

Employees are sending more than just words and pictures into cyberspace. Here's how IT is protecting corporate data. **By Mary Brandel**

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EXCHANGE CORNER VIEWS

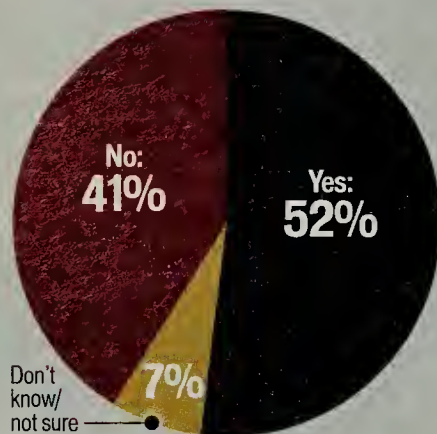
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Microsoft
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Put It in Writing

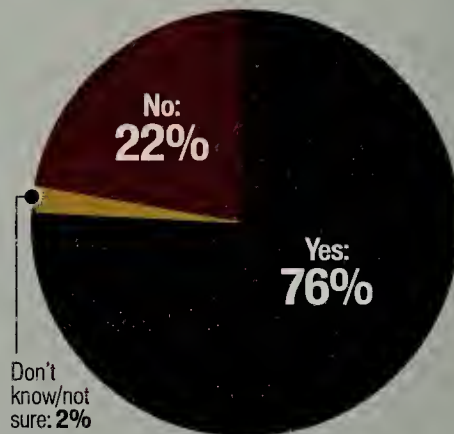
Does your company have a policy regarding employee participation in sites such as MySpace, posting to blogs or wikis during work hours, or visiting online sites such as YouTube, Pandora and Second Life?



BASE: 113 IT MANAGERS

Just Say No

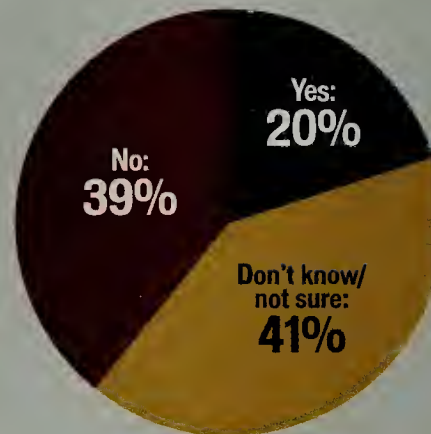
Does your company ban activities such as posting to blogs or visiting social/networking sites?



BASE: THE 59 RESPONDENTS WHO SAID THEIR COMPANIES HAVE POLICIES REGARDING SOCIAL SITES

Unscrutinized Use

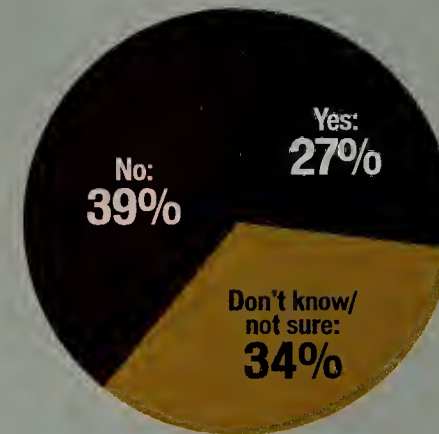
Will your company be working on a policy regarding employee participation in social/networking sites in 2007?



BASE: THE 54 RESPONDENTS WHO WEREN'T SURE OR SAID THEIR COMPANIES DON'T HAVE POLICIES REGARDING SOCIAL SITES

Growing Problem

Has your organization had security problems related to social/networking sites?



BASE: 113 IT MANAGERS

SOURCE: EXCLUSIVE COMPUTERWORLD SURVEY, FEBRUARY 2007

Continued from page 26

worm, which hit Yahoo Mail users, and the Samy and Spaceflash worms, which spread among MySpace users.

For many, the blogging dilemma comes down to weighing the risks and benefits of spotlighting the company's intellectual capital — the opinions of its employees — and opening new channels of communication with its customers without inadvertently leaking valuable information into the public sphere.

And loss of trade secrets is only one type of threat, according to Diana McKenzie, chairwoman of the information technology group at law firm Neal, Gerber & Eisenberg LLP in Chicago. Other common problems include co-worker harassment and defamation, securities law violations and intellectual property abuses, such as misuse of copyrights or trademarks.

"It's not uncommon for employees to not know better and say, 'We're going to have great earnings this month,' during a company's quiet period," McKenzie says. She even knows of a blogger who discussed where his employer planned to set up hidden security cameras.

Why Not Institute a Policy?

Companies can avoid legal troubles by creating policies for blogging, but not everyone makes that effort. In an exclusive *Computerworld* survey of 113 IT managers, just over half of the respondents reported that their companies have policies regarding employee participation in social and networking sites (see charts above).

When setting up a blogging policy, Hallawell says, IT should work with the legal and human resources departments to identify rules that might limit how restrictive the policy can be. For

example, she says, some state laws — and some trade union agreements — don't let companies prevent discussion of political activities or certain workplace safety issues. "Blogging raises many complex and gray issues

HOW TO Guard Corporate Secrets in a Web 2.0 World

There's no surefire way to completely eliminate the risk of information leakage in a blogging environment. **Due diligence requires a multipronged approach involving defense, detection and deterrence.**

■ **Re-evaluate whether you need to update your antivirus and malicious code protection for Web traffic.** Consider a combination approach recommended by Gartner that involves antivirus software, URL filtering, application controls, Web site reputation services and safe search technologies.

■ **Establish a blog oversight committee** — a group of employee bloggers committed to promoting blogging within the company and making sure that the company's interests are served.

■ **Update acceptable-use, ethics, trade-secret and other employee policies** to deal with blogs and community sites like MySpace and YouTube.

■ **Consider whether to deploy content monitoring** and filtering technology, and update your URL filtering tools.

for companies," she says.

For Miller, pulling together a blogging policy wasn't difficult. He used Florham Park, N.J.-based Global Crossing's existing guidelines regarding ethics and acceptable use of technology as a foundation and augmented them to allow for the special considerations of blogging. Particularly relevant were the company's policies for use of e-mail, "which had a direct parallel to blogging, in terms of confidential information and intellectual property," Miller says.

Basically, the policy allows all employees to participate in the Web 2.0 community, including posting to blogs and setting up a blog, as long as they follow the guidelines. For instance, bloggers need to identify themselves as representatives of Global Crossing and include disclaimers saying that the views expressed don't necessarily represent the views of the company.

The policy also includes a section on "doing no harm" that warns against inflammatory posts. "We provide guidance on taking your time and making sure that what you're posting represents you and what you're trying to get across," Miller says. "Don't post when you're feeling hot-tempered — stop and cool off."

The policy is aimed at anyone who chooses to post to a blog or set up his own personal blog, but it also pertains to Global Crossing's corporate blog, which spotlights six employees, each dealing with a specific issue. "We think there's value to the corporation in expanding the communication boundaries, but in a way that we're controlling what's going on and putting the right measures in place," Miller says.

Dune Capital Management LP takes

a more defensive approach to Web 2.0 security, according to Alphonse Edouard, vice president of IT at the New York-based investment firm. He uses QRadar network security software from Q1 Labs Inc. in Waltham, Mass., to block employees from accessing Web sites such as Plaxo and YouTube during heavy trading times. This is as much a preemptive strike against malicious code as it is a way to prevent overuse of precious network bandwidth, he says.

"When someone's doing a music download, they're cutting into the business resource of someone else trying to get market data," Edouard says. "So we use QRadar to secure our assets and manage resources on the network."

QRadar monitors which sites employees are visiting and generates flow reports of uploads, downloads and file transfers, as well as how all that activity is affecting bandwidth. This capability also helps Edouard's team spot problems such as malware attacking the network from within the firewall.

For example, a Trojan horse might enter the network through an e-mail message and establish a secure connection with an outside Web site that results in 100 pop-up ads streaming over the network. Many companies use antivirus software to protect against this, "but you only need one machine compromised, and before you know it, 20 or 30 are compromised by the end of the day," Edouard says. With QRadar, he can quickly block access to the site when he's alerted to a suspicious traffic pattern on the network.

Edouard is also cautious about allowing employees to install weather-tracking or search engine tool bars on

Continued on page 30



How much of your stored data can you afford to lose? How about none?

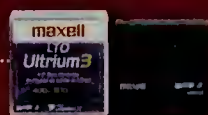


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HOW TO NOT BUNGLE YOUR BLOG

WHEN YOUR COMPANY opens its doors to the blogosphere, it opens a Pandora's box of potential threats, including defamation suits, securities law violations, misuse of intellectual property and loss of trade secrets.

The most sensible way to counter those threats is to write, publish and uniformly apply a blogging policy, says Gartner analyst Arabella Hallawell. "Companies need to update their acceptable-use, trade-secret and other policies to deal with blogs and community sites like MySpace and YouTube," she says.

SMART COMPANIES

These companies have well-established blogging policies:

■ Sun Microsystems Inc.

www.tbray.org/ongoing/When/200x/2004/05/02/Policy

■ IBM

www.ibm.com/developerworks/blogs/page/jasnell?entry=blogging_ibm

■ Thomas Nelson Inc.

http://michaelhyatt.blogs.com/workingsmart/2005/03/corporate_blog.html

■ Yahoo Inc.

<http://jeremy.zawodny.com/yahoo/yahoo-blog-guidelines.pdf>

■ Plaxo Inc.

<http://blog.plaxoed.com/?p=41>

■ Hill & Knowlton Inc.

<http://blogs.hillandknowlton.com/blogs/niallcook/archive/2005/05/19/279.aspx>

THE BASICS

The companies above all have sets of core blogging guidelines, although the wording of those guidelines ranges from colorful (Sun) to straightforward (Plaxo). Those basic tenets can be summed up as follows:

■ **Don't divulge trade secrets** (or what

Sun calls "the recipe for one of our secret sauces").

■ **Protect confidential and proprietary information.** IBM, for example, requires bloggers to ask permission to publish someone's picture or a conversation that was meant to be private.

■ **Follow financial laws** that forbid discussions about revenue, future product ship dates, pending mergers, alliances, road maps, share price or business performance.

■ **Respect copyright** and fair use laws.

■ **Don't post anonymously** (or, as IBM says, "Be who you are").

■ **Include a disclaimer** saying that your views do not necessarily reflect those of your company.

■ **Remember that you are legally responsible** for your commentary and that bloggers can be held personally liable for any commentary deemed defamatory, obscene, proprietary or libelous.

■ **Ask your manager** if you have any questions regarding what's appropriate to include in your blog.

■ **Ensure that your blogging doesn't interfere with your work.** Or, as IBM's policy states, "Don't forget your day job."

These policies contain some surprises, like reminders to "be interesting," as well as advice that many of us have heard since elementary school (like "Be nice" and "Spell correctly"). Here's a look at some of them:

■ **Provide context to your argument.**

Whether you are posting in praise or criticism, you are encouraged to develop a thoughtful argument that extends well beyond "[Insert name] is cool" or "[Insert name] sucks."

SOURCE: YAHOO

■ **Put a copyright notice on your site in your name** ("© 2005, John Smith").

SOURCE: THOMAS NELSON

■ **Be nice.** Avoid attacking other individuals or companies. You are welcome to disagree with the company's leaders, provided your tone is respectful. If in doubt, we suggest that you "sleep on it" before posting to your blog.

SOURCE: THOMAS NELSON

■ **Be interesting.** Writing is hard work.

There's no point doing it if people don't read it.

SOURCE: SUN

■ **Write what you know.** A Solaris architect who publishes rants on marketing strategy or whether Java should be open-sourced has a good chance of being embarrassed by a real expert or of being boring. SOURCE: SUN

■ **Expose your personality.** People like to know who is writing what they're reading. But remember, a blog is a public place and you should try to avoid embarrassing your readers or the company. SOURCE: SUN

■ **Quality matters.** Use a spell-checker. If you're not design-oriented, ask someone who is whether your blog looks decent, and take their advice on how to improve it. SOURCE: SUN

■ **Know your fellow bloggers.** The most successful bloggers are those who pay attention to what others are saying about the topics they want to write about and generously reference and link to them. Drop your fellow bloggers a note to introduce yourself and your blog.

SOURCE: IBM

■ **Don't pick fights.** Brawls may earn traffic, but nobody wins in the end. Don't try to settle scores or goad competitors or others into inflammatory debates. SOURCE: IBM

■ **What would your mother say?** You will probably be read or heard by people who know you. Post as if everyone you know reads or hears every word. SOURCE: PLAXO

quarantined, "which is not an easy job," he says.

Lastly, CMF tools don't address image-based content. "This technology is a useful part of a comprehensive data leakage prevention effort, but it's not enough by itself," Rhodes-Ousley concludes.

"This is still an emerging market," with less than \$50 million to \$60 million in sales in 2006, says Hallawell. "But we expect more acquisitions in this space by antivirus, e-mail and URL filtering vendors," she adds.

A Management Failure

The weaknesses of filtering tools aren't just technological ones, according to Tim Bray, director of Web technologies at Sun Microsystems Inc. They're also managerial.

"If you think you need filtering technologies to be sure your employees aren't damaging your reputation, that's a management problem, not a technology one," he says. "If employees can't be trusted, technology is the least of your problems."

Sun was one of the first companies to institute a blogging policy and claims 2,000 to 3,000 active bloggers among its employees, both on and off the corporate-sponsored blogging site (www.blogs.sun.com). Bray says Sun doesn't worry too much about malicious code entering the network from Web 2.0 sites because as a Macintosh shop, it's less vulnerable to viruses.

Bray has maintained his own personal blog since 2003. "One of the reasons why blogs have been so effective in general and extremely so at Sun is that the message has not been homogenized," he says. "Press releases are not particularly what ordinary people want to read." Active blogging has also helped the company communicate better with its community of users. "We have much more sensitive antennas than we would without it," Bray says.

Global Crossing has filtering technology but uses it only when abuse is suspected. The URL filtering system from Secure Computing Corp. in San Jose can track where employees are spending time on the Web. "It's important to have a policy in place and allow people to get out and participate in the community," Miller says. "But it's also important from a security standpoint to have the right tools in place so that if there is misuse, you can go back and take proactive steps to stop it." ▀

Brandel is a Computerworld contributing writer. You can contact her at marybrandel@verizon.net.

Continued from page 28

their workstations. "These add-ins use substantial resources and aren't really work-related," he says. "We prefer they use Web-based rather than application-based tools."

More Policy Than Technology

Organizations are more likely to use policy rather than technology to control the risks raised by Web 2.0 technologies, particularly blogging, according to Hallawell. For instance, she says, well under 15% of companies scan Web traffic for viruses. That's mainly because existing antivirus tools tend to cause performance problems and many companies don't think the threat is very high.

A better option for protecting your network against malicious code from

Web 2.0 sites, Hallawell says, is an emerging technology she calls the "secure Web gateway," which is a combination of antivirus software, URL filtering, application controls, Web reputation services and "safe search" tools.

Tools in the emerging content monitoring and filtering (CMF) category are another option. Companies can use CMF systems to block access to Web sites and scan data streams for predetermined character strings to monitor what employees are posting when using the company network. Other names for this type of tool include content security and enterprise content governance systems, says Mark Rhodes-Ousley, an information security architect and author of *Network Security: The Complete Reference* (McGraw-Hill Osborne Media, 2003).

Vendors in this category include Tablus Inc., Reconnex Corp., Vontu Inc., Websense Inc.'s Port Authority unit, The Fidelis Group Inc., Vericept Corp. and Clearswift Ltd.

While CMF technology shows promise, it also has limitations, says Rhodes-Ousley. For instance, "blocking access to specific locations is a cumbersome process inevitably punctuated by holes," he says. And because determining what content to look for is the responsibility of the people configuring the technology, it's a naturally error-prone effort.

In addition, "keyword searches aren't going to catch everything," says Rhodes-Ousley. And while some of these products allow for quarantining certain types of content, a moderator has to sift through everything that's



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IM Confidential

Love it or hate it, instant messaging has potential for security problems. Here's how to avoid them. **By Jennifer McAdams**

CELEBRITY TABLOID headlines would scream if the Screen Actors Guild-Producers Pension and Health Plans (SAGPH) suffered an instant messaging breach that spilled sensitive medical information about the nation's biggest stars. So, like many other organizations, this benefits provider enforces rules to prevent IM from jeopardizing its data security.

Aside from the bulk of financial services corporations, most companies aren't totally shutting employees out of IM communication in the workplace. In fact, in an exclusive *Computerworld* survey of 113 IT managers, 40% said their companies use instant messaging as a sanctioned form of interoffice or intercompany communication.

But while companies are recognizing a plethora of legitimate business uses for the technology, many are moving slowly to incorporate security technologies that drastically reduce IM risks like spyware, virus infiltration, phishing and data compromise — the same vulnerabilities often associated with e-mail. In fact, in a February survey of 192 IT executives by Enterprise Strategy Group Inc., nearly 30% of respondents said they hadn't deployed any IM security technology.

The Pain of Progress

Upfront recognition of IM as a powerful business tool also requires upfront employee accountability for its use. Companies embracing corporate IM are controlling its use through guidelines and policies, and IT executives are sorting through a variety of security technologies, such as URL filters, proxy servers, firewalls and stand-alone IM security tools.

"Very few companies can ban IM usage outright," says Peter Firstbrook, an analyst at Gartner Inc. "It has simply become too valuable a communication tool. However, some enterprises are restricting both the type of IM network employees use and advanced features such as file transfers and gaming."

They may be reluctant to curb or ban



DAVID HOLLENBACH

HOW TO

Manage Your Security Risk From Instant Messaging

Most organizations aren't totally shutting employees out of IM communication in the workplace. **Experts offer this advice for weighing the risk and implementing security policies:**

- **Examine business uses** for the technology and weigh trade-offs before deciding to impose an IM ban.
- **Consider including IM** in established rules for e-mail usage in the early stages of IM adoption and follow e-mail best practices.
- **Determine upfront** whether industry regulations or internal policies mandate IM archiving, and plan accordingly.
- **Immediately suspend IM** messages that run afoul of industry regulations, and notify compliance officers or attorneys.

IM, but companies expect their employees to behave appropriately, says Kevin Donnellan, SAGPH's assistant CIO. "The most important action enterprises can take in controlling instant messaging use is to ensure employees are using it under prescribed guidelines," he says.

SAGPH relies on Symantec Corp.'s IM Manager to enforce usage policies. IM Manager provides security and archiving capabilities for several IM functions, such as text messaging, and application and file sharing — including audio and video swaps, which have become common in IM exchanges. SAGPH and other health care organizations must also contend with IM-related compliance and data retention requirements of major statutes such as the Health Insurance Portability and Accountability Act.

Too Risky

Meanwhile, another heavily regulated sector has looked long and hard at IM and still isn't convinced that it's worth the risk. "The financial services industry has had to focus on this area for a few years now because Securities and Exchange Commission regulations require retention of IM communications for three years," says Richard Wolf, managing partner at Lexakos LLC, a West Orange, N.J.-based business advisory firm that specializes in compliance and records management.

SEC oversight and those hefty regulations factored heavily into an IM ban at First National Bank of Bosque County in Valley Mills, Texas. "We looked at all the benefits and risks and decided some time ago that the risk far outweighs any benefits we might realize," says Brent Rickels, a vice president at the bank. "E-mail can do many of the things that IM can accomplish, and there is just too much opportunity for information to leave the institution without approval."

It seems that organizations either love or hate the idea of IM. "Companies are taking one of two approaches. Either they're embracing the technology and installing IM-centric security devices, such as proxy servers, or they're banning IM in the enterprise altogether," says Robert Hoffer, managing director at San Mateo, Calif.-based NewForth Partners LLC.

The mergers-and-acquisitions advisory services firm relies on IM extensively. "We use IM to manage all of our

software engineers in Thailand, Russia and India," Hoffer says.

Along with using IM internally, NewForth advises and educates clients on the business case for IM. Hoffer offers some tactical advice to companies poised to formally invite IM into the organization. "Purchase an IM proxy server that can be scaled to your needs quickly," he suggests. "Make sure that your proxy server vendor supports multiple IM networks' native protocols for file transfer. Always keep in mind that IM is supposed to be 'instant messaging,' so don't implement solutions that try to wrap in e-mail-type interfaces around IM. Let IM be what it is."

While companies such as NewForth are at peace with IM, Atlanta-based Royal Food Service Co. is among those resolutely opposed to it. "We don't allow IM at all in our organization," says Jerry Maze, CIO at the supplier of produce and dairy products. "In addition to the security concerns, we feel IM allows employees to waste a lot of time. We don't feel it serves any purpose that e-mail can't serve in our industry."

Royal uses San Mateo-based ScanSafe Inc.'s IM Security-as-a-Service offering to shut out IM use in the organization. Businesses less opposed to internal IM use, however, can use ScanSafe's managed IM service to help fight threats such as spam for IM, or "spim." Like many other IM security products and services now on the market, the ScanSafe service also fortifies accountability by linking screen names to employees.

Vendors selling IM security appliances include Akonix Systems Inc., FaceTime Communications Inc. and iAnywhere Solutions Inc. Meanwhile, some software providers are offering IM security and management services in enterprise suites, such as IBM Lotus Sametime. In addition, some security vendors, such as SonicWall Inc., are incorporating IM control functions in content-security offerings.

Despite the wealth of security technologies now available, IM is still a communications medium that not everyone has embraced. "I find IM very intrusive myself," Maze acknowledges.

Hence, enterprise IT executives poised to sanction internal IM use will likely find themselves contending with the strong convictions of company officials and regulatory realities that can make it a tough decision. ■

McAdams is a freelance writer in Vienna, Va. Contact her at JMTechWriter@aol.com.

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Your Gadgets Are Springing Leaks

Handheld electronics travel everywhere in your company, spilling data along the way. Here's how to plug the holes. **By Mary K. Pratt**

FABI GOWER saw big threats in small packages.

As vice president of information systems at health care recruiting firm Martin, Fletcher in Irving, Texas, Gower feared that various handheld gadgets could corrupt her network and the data on it.

"When PDAs first became popular, that was the first red flag. That was the 'Uh-oh, they can plug these right into the computer, and who knows what they're taking back and forth,'" Gower says.

She contemplated using Super Glue to plug up USB ports but resisted taking such a reactionary step. Instead, Gower developed a stronger, more comprehensive security policy that regulates the use of smart phones and tablet computers. Gower also began using Sanctuary Device Control, an application from SecureWave Inc. in Herndon, Va., to prevent unauthorized access to the network. "I feel very, very comfortable that no one can plug in a device [without my being] aware of it," she says.

Ban or Control?

Workers of all stripes are eagerly embracing handheld electronics, from smart phones and USB drives to MP3 players and portable gaming players. And while not every device has a business use, they all can plug into the corporate network. That means sensitive data can leak out and malware can come in.

It might be tempting to simply lock down all access, but such Draconian actions are rarely required. Rather, security leaders say, executives should weigh the risk of harm to their companies against workers' need for these miniature devices. They should then develop comprehensive policies about who has access to what data on certain devices and enforce those policies using appropriate technological controls.

"I don't think it's realistic to think you can prevent the use of these devices. Companies have to think in terms of controlling them," says Jonathan G. Gossels, president of SystemExperts Corp., a Sudbury, Mass.-based provider of network security consulting services.

Controlling these devices has some unique challenges. Their size makes them difficult to detect, and they can be easily lost or stolen. They're also cheap enough for the average worker to own, which means companies are seeing more of these devices, and a greater variety of them, hooked up to their networks.

"We have a sense we're only seeing the tip of the iceberg. Because they're so small and portable, they're always under the radar," says Kent Anderson,

Continued on page 36



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WHAT EXECUTIVES THINK

The wave of handheld and miniature devices has executives worried, according to a survey conducted by Forrester Consulting and Vontu Inc., a San Francisco provider of data loss prevention software. **Here are some of the results, which were released in January:**

- 95% said data loss prevention is a major priority for 2007.
- 76% said they're not satisfied with the visibility they have into confidential data being downloaded to PCs, and 72% named data loss via removable media as their top concern.
- 52% had lost confidential data through removable media such as USB drives in the past two years.
- 40% said they rely mainly on paper-based

controls, i.e., written policies given to employees, to prevent such problems.

86% said data loss prevention is part of their 2007 budget, and 76% said their budget for data loss prevention is up this year over last.

69% are pursuing endpoint data loss prevention applications, with 44% piloting or planning to deploy such tools in 2007.

— MARY K. PRATT

SOURCE: AN ONLINE SURVEY OF 151 DECISION-MAKERS AT NORTH AMERICAN COMPANIES WITH ANNUAL REVENUE OF MORE THAN \$200 MILLION

Continued from page 34

managing director at Network Risk Management LLC in Portland, Ore., and a member of the Information Systems and Audit Control Association (ISACA) Certified Information Security Manager board.

That explains, in part, why many companies still don't have appropriate policies and controls in place.

HOW TO

Protect Your Data from Mini Device Leaks

One of the biggest threats to network and data security today comes from mini devices. Irony? Yes. Insurmountable? No. **To deal with this threat, start with these steps:**

■ **Establish a corporate policy** that specifies who can use what devices under what circumstances.

■ **Take a look at what you have.** Account for corporate-owned devices. Determine whether workers are using personal devices at work. Evaluate whether your antivirus software can adequately protect your network from malware coming from these devices.

■ **Back up policy with technology.** Allow only corporate-owned devices onto your network. Consider using applications that block unauthorized access to USB ports. Implement sound data-protection policies that include encryption of sensitive data, so if a mini device is lost, the data is not compromised. If needed, upgrade your software to block malware from mini devices.

"In simple terms, they're behind the curve," Anderson says. "Most companies have an awareness [that] there's a problem. They're starting to see it, but they're at somewhat of a loss as to what to do about it."

Like any other IT or business initiative, a successful strategy for controlling the use of removable media requires thoughtful planning, careful execution and the right tools.

"There's actually a balance that has to be considered," says Rena Mears, national and global service line leader for privacy and data protection at Deloitte & Touche LLP in New York.

Senior officers have to think of the company's data as an asset and consider what has the highest value, what is most at risk, what protections are necessary and who should have access to what, Mears says. They have to weigh all that against the need to conduct business in an efficient manner, which today, like it or not, involves miniature mobile devices, she says.

"You have to balance the protection and the productivity. You don't want to absolutely ban people from using these things," says Bill Boni, corporate information security officer at Motorola Inc. in Schaumburg, Ill., and international vice president at the ISACA. Companies need to "make risk-based decisions that are acceptable to them," Boni adds.

Find the Right Fit

SystemExperts' Gossels and Richard Mackey, vice president of consulting at the company, recommend a multi-pronged approach. First, develop a policy that defines what the company considers acceptable use of these devices. Some companies might decide to limit the use of USB flash drives to specific machines and workers. Others might decide to disable all USB ports in highly sensitive environments.

Gossels and Mackey say that com-

panies must then back up their policy with technical solutions, being sure that their virus scans, for example, extend to devices plugged into USB ports. They must decide which devices need password protections and what data needs encryption so the loss or theft of a PDA or smart phone won't put confidential information at risk.

Chris Kashner, a desktop consulting specialist at Highmark Blue Cross Blue Shield in Pittsburgh, has successfully brought such devices into his organization while protecting network and data security. Kashner started last year by looking at what workers were plugging into the network. The audit found "a lot of MP3 players and more flash drives than we ever imagined," he says.

Kashner then worked with others to develop companywide policies and explain the new rules to Highmark's 13,000 employees. He also implemented Pointsec Device Protector, which allows the company to enforce its policies. For example, flash drives that don't belong to Highmark are set to read only.

Moreover, Kashner says that because Highmark allows only company-purchased devices, it can enforce its encryption policies, which means no data goes out the door unprotected.

Such measures take companies one step closer to the more comprehensive solution that some experts advocate: protection that follows the data itself.

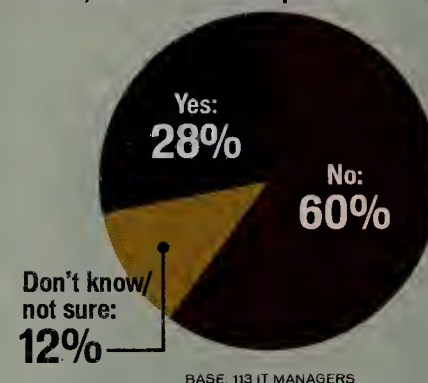
"The answer isn't to try to control devices. The answer is to control the data," Anderson says. To do that effectively, he says, companies not only need policies about the approved use of these devices, but also, more important, data classification policies that teach workers how to properly recognize, classify and handle sensitive material.

Jim Molini, principal information security engineer at The Mitre Corp., a not-for-profit IT services company in McLean, Va., knows firsthand why that's so important. He once asked to transfer files to a client's system using a flash drive, but his client said such devices were prohibited. Instead, Molini had to put the material on a CD. He wonders, Was the data — or system — any more secure by using a CD instead of a flash drive? Molini says he doubts it, considering that the CD now contains a permanent record of the sensitive information. "We're finding more and more that where the data is located is irrelevant," he says. Ultimately, it's about the protection of the data, wherever it may reside. ▀

Pratt is a Computerworld contributing writer in Waltham, Mass. Contact her at marykpratt@verizon.net.

Loose in the Workplace

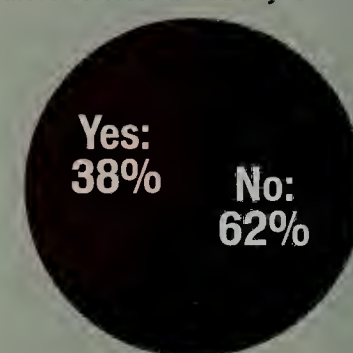
Does your company have a policy that covers employees having small devices at work, such as iPods, USB drives or cell phones with cameras?



BASE: 113 IT MANAGERS

Joining the Banned

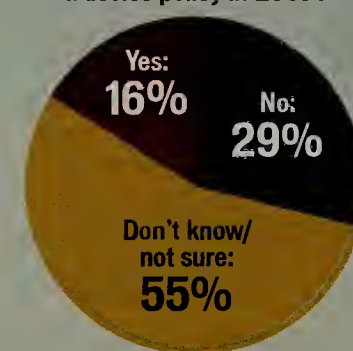
Are these devices banned at your company?



BASE: 32 RESPONDENTS WHO SAID THEIR COMPANIES HAVE A POLICY THAT COVERS EMPLOYEES HAVING SMALL DEVICES AT WORK

Policy Decision

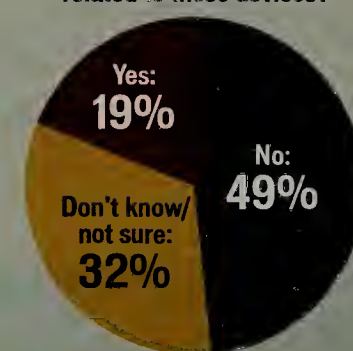
Will your company be working on a device policy in 2007?



BASE: 81 RESPONDENTS WHO SAID THEIR COMPANIES DON'T HAVE A POLICY THAT COVERS EMPLOYEES HAVING SMALL DEVICES AT WORK

Small Threat?

Have you had security problems related to these devices?



BASE: 113 IT MANAGERS

SOURCE: EXCLUSIVE COMPUTERWORLD SURVEY, FEBRUARY 2007



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The Conversation

'Thou shalt not' is a big turnoff for the Gen Y crowd. Try a marketing tack instead. **By Thomas Hoffman**

HAVING SPENT 23 years in the information security field, including stints as chief information security officer at Charles Schwab & Co., Bank of America Corp. and Volkswagen Credit, Ed Zeitler has learned a lot about how to convey the importance of information security to employees.

"The message has to be short and sweet and say what it has to say," says Zeitler, who was recently named executive director of the International Information Systems Security Certification Consortium in Palm Harbor, Fla. "The less grand it is, the better received it is."

In some of the companies where he has been CISO, Zeitler and his team have put together a "Did you know?" type of FAQ to draw employee attention to phone and PDA security. "It has to be entertaining," he says.

Or it has to be memorable, like an advertisement that reads, "Don't think your iPod is a threat? Guess again," says Jon Miller, president of the Long Island chapter of the FBI's InfraGard program.

Zeitler, Miller and other IT leaders have found that to get the security message to stick, it's best to communicate frequently with workers but to vary the technique and type of medium used.

"One size does not fit all, because people have different ways of learning and doing things," says Howard Schmidt, former White House cybersecurity adviser and CISO at Microsoft Corp. and eBay Inc. Schmidt has since founded R&H Security Consulting LLC in Issaquah, Wash.

Information security "is a marketing campaign," says Mark Lobel, a partner at PricewaterhouseCoopers in New York. As such, he says, IT leaders should consider who their target audience is, which channels they should use to convey messages and the key messages they're trying to get across.

To assist with this, each time he has stepped in as a corporate CISO, Zeitler has made it a top priority to add a communications specialist to his staff.

"I can get more security out of a company by hiring a communications specialist who's really sharp than buying a



DAVID HOLLENBACH

HOW TO

Get the Word Out to Your Staff

All the technology in the world can't keep your information safe if your workers aren't clued in to company policies. **Here are tips for effectively communicating information security to workers:**

- **Know your audience, and consider the most effective media for getting a particular message across to different crowds.** Baby boomers prefer straightforward communication, such as well-written memos, while Gen Y workers prefer messages that are quick and to the point.
- **Use interactive communication techniques,** such as video games and comical multiple-choice quizzes. These can be engaging and let managers assess the effectiveness of communications.
- **Avoid top-down edicts on corporate security policies, which don't resonate well with younger workers.** Annual broadcasts aren't frequent enough and are quickly forgotten.
- **Try to make newsletters or e-mails colorful.** For instance, a set of "Did you know?" bullet points can be both entertaining and educational.
- **In face-to-face meetings with workers, explain not only what is being done (for example, desktop encryption), but also why it's being done.** Be sure to allow employees to ask questions and provide feedback. It not only helps them feel like their opinions matter, but it also gives managers that can help them improve policies and operations.
- **Offer workers security-related information that can be applied outside the workplace,** such as the technical risks of sharing iPod songs on a peer-to-peer level; employees are more likely to pay attention to policies that also apply in their personal lives.
- **Have a communications specialist or business executive discuss the importance of information security.** This can help convince employees that the topic is a business issue — and not something they solely equate with IT.

bunch of network security equipment," says Zeitler. That's because communications professionals understand the audience they're trying to reach and which marketing strategies and media will appeal most, he says.

That can be particularly useful for IT executives who might struggle with

how to connect with workers who are 20 or 30 years younger than they are.

"When we think about the younger generation, they don't trust a lot of people, but they do trust their managers," says Susan Dorflinger, director of global employee marketing at GE Real Estate in Stamford, Conn. So in addition

to posting security information on the company intranet, sending e-mail blasts and placing posters in high-traffic areas, GE Real Estate executives also encourage managers to have frequent face-to-face communication with younger employees.

To help reinforce the security message, Dorflinger often attends small department meetings of 10 to 15 employees and their managers, "and she may mention the importance of not leaving your BlackBerry lying around," notes Hank Zupnick, CIO at GE Real Estate.

Although face-to-face interactions have worked well, say Dorflinger and Zupnick, billboard-type advertisements have also proved effective with the younger crowd. "Some of our fliers don't have the standard computer images on them, but [rather] images that make people stop and think," such as a banana peel on the floor, says Dorflinger.

"We try not to make it look like an IT thing," agrees Zupnick, since 95% of GE Real Estate's employees work outside of the IT department.

At Freddie Mac, the security division relies heavily on the organization's intranet to share information with employees, but brown-bag lunches with 20 to 50 people tend to work well when the security team has a specific topic it wants to reinforce, says John Fox, vice president of data quality and security at the McLean, Va.-based mortgage purchaser.

For instance, Freddie Mac's security group started a project late last year to encrypt all of the company's laptops and desktops — an effort that would eventually touch each of its 5,300 employees, says Fox. Instead of e-mailing information about the project to staffers, the security group held a series of brown-bag lunches to explain why the encryption effort was being done, what it would achieve and why everyone's participation was essential, he says.

"It's a two-way engagement," says Fox. "We're able to get our message out, but we also get feedback on how we do the deployment of the project. It gives us a more effective way of understanding what we need to look out for and keep the projects successful."

In addition receiving information via face-to-face discussions, twentysomethings like to get security updates in the form of podcasts and webcasts that they can download to their mobile devices and view at any time, says Schmidt.

But do they bother to view it when they could be sending text messages to friends? Absolutely, says Schmidt. "The easier the company makes it for them to absorb something," he says, "the more likely they'll pay attention to it."



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Six Ways To Stop Data Leaks

A data breach at DuPont offers timely lessons for thwarting insider threats. **By Jaikumar Vijayan**

DURING THE FIVE MONTHS when Gary Min was stealing \$400 million worth of proprietary information from a DuPont database, he downloaded and accessed more than 15 times as many documents as the next most active user of the system. But he wasn't caught until after he left the company for a rival firm.

Min pleaded guilty last November to misappropriating DuPont data and is scheduled to be sentenced on March 29. His case is only the latest to highlight a lack of internal controls at many companies for dealing with insider threats. In February, a cell development technologist at battery maker Duracell admitted to stealing research related to the company's AA batteries, e-mailing the information to his home computer and then sending it to two Duracell rivals.

Dealing with such risks can be challenging, especially in large corporations, says Tom Bowers, former manager of information security operations for the global security division of Wyeth Pharmaceuticals Inc.

"I am not at all surprised" about what happened at DuPont, says Bowers, who is now managing director at Security Constructs LLC, a Fleetwood, Pa.-based consultancy. "When you have a huge multinational like that, your security department is never really going to fully have any realistic idea of where or how the information is flowing," he says.

But there are ways to mitigate the risks and keep track of what's going on inside the firewall. Experts suggest taking the following steps:

1 GET A HANDLE ON THE DATA. It's impossible to set controls for sensitive and proprietary information on your network if you don't even know where that data is.

An organization's sensitive data is widely distributed throughout its network, says Eric Ogren, an analyst at Enterprise Strategy Group Inc. in Milford, Mass. Important data resides not just in databases, but also in e-mail messages, on individual PCs and as data objects in Web portals. Sensitive information also comes in many forms, including credit card and Social Security numbers. And trade secrets can be found in many types of documents and files, such as customer contracts and agreements and product development specifications, Ogren says.

Implementing one set of controls for all data types can be inefficient and impractical. Instead, categorize data and choose the most appropriate set of controls for each data class. Tools that automatically scan company networks and identify where sensitive data resides are available from vendors such as Reconnex Inc., Tablus Inc. and Websense Inc., and such products are growing in number. Many of these tools can be used to separate data into different categories based on policies defined by a company.

2 MONITOR CONTENT IN MOTION. As companies Web-enable their businesses and link up with networks belonging to partners, suppliers and customers, it is vital to keep track of what's flowing over those networks.

Content monitoring was a core "foundation piece" for Wyeth's data protection strategy, Bowers says. With so many network "egress points" for data, it is vital to be able to monitor network traffic, he says.

Vendors such as Vericept Corp., Vontu Inc., Oakley Networks Inc., Reconnex and Websense all sell products that inspect e-mail, instant messaging and peer-to-peer file-sharing systems, as well as Web postings and FTP sites, for data that may be exiting a network in violation of company policies. The tools sit near network gateways and are designed to issue alerts when they find suspicious data packets. Many of the products can also be used to enforce actions such as blocking data or encrypting it when it leaves the network.

Such content-filtering tools allowed Wyeth to "look at everything coming in and going out of our networks," Bowers says. "We monitored all ports and all protocols for content."

3 KEEP AN EYE ON DATABASES, WHICH CAN CONTAIN A COMPANY'S INFORMATIONAL CROWN JEWELS. You should know not only who's accessing databases, but also when, where, how and why they're doing so. Database monitoring tools that are designed to allow companies to monitor database access and activity are available from companies such as Imperva Inc., Guardium Inc., Application Security Inc. and Lumigent Technologies Inc. Such products are designed to keep an eye on what users and administrators are doing with their access privileges and either prevent certain actions — such as modifying, copying, deleting or downloading large sets of files — or send out alerts when someone attempts one of those actions. They also can provide clear audit trails that track when people try to act outside of corporate policy.

Encrypting sensitive data in databases is another measure companies should consider, if they haven't done so already.

4 LIMIT USER PRIVILEGES. Most companies give employees far more access than they really need, says Amichai Shulman, chief technology officer at Imperva. Monitoring user access to mission-critical data and detecting unauthorized access to high-risk data are key steps to take.

Create access policies that limit users' network privileges strictly to what is required for their jobs, and set

controls for enforcing those policies, Shulman says. For instance, have controls that issue alerts when someone who might normally work with about 10 documents a day suddenly starts accessing a lot more, he says.

Making access control decisions on an "insider vs. outsider" basis is overly simplistic, says Matt Kesner, CTO at Fenwick & West LLC, a Mountain View, Calif.-based law firm. Sometimes an outsider may legitimately need equal or greater access to internal assets than what an insider would need. For example, Fenwick & West's client extranets are used by clients to collaborate with the firm's attorneys, Kesner says, noting that external users are sometimes "more interested in our data" than insiders.

5 COVER THOSE ENDPOINTS. The proliferation of portable devices, such as laptops and handhelds, and removable media, such as USB memory sticks and iPods, makes it easier than ever for rogue insiders to walk away with gobs of corporate data. Companies must develop measures for centrally controlling and monitoring which devices can be attached to corporate networks and systems and what data can be downloaded, uploaded and stored on them. Doing that can be a challenge, but several tools are becoming available that promise to make the task easier, including products from Code Green Networks Inc., ControlGuard Inc. and SecureWave SA.

"When it comes right down to it, very few companies have put in place effective controls that enable them to monitor internal systems closely and allow them to follow the movement of data" on their networks, says Alex Bakman, CEO of Ecora Software Corp. That means breaches can go unnoticed for long periods of time, he says.

6 CENTRALIZE YOUR INTELLECTUAL PROPERTY DATA. It's not feasible for a large company to protect intellectual property scattered in multiple systems, says Ira Winkler, an independent security consultant and a *Computerworld*-com columnist. Therefore, storing intellectual property data in a centralized document library system whenever possible makes for better security and information sharing, he says.

"Normally 'putting all your eggs into one basket' has a negative connotation," Winkler says. But in this case, he says, it's easier to protect one system than it is to protect numerous systems. ▀

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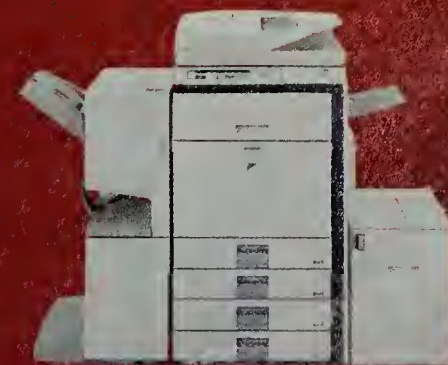
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Snapshots

With Malice

The top 10 threats to enterprise security:

1	Trojans, viruses, worms and other malicious code
2	Spyware
3	Spam
4	Employee error (unintentional)
5	Hackers
6	Application vulnerabilities
7	Data stolen by an employee or business partner
8	Deployment of new technology
9	Wireless LANs
10	Insider sabotage

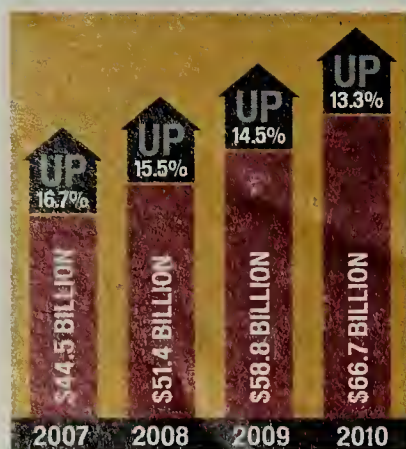
The Big Boys

The top 10 vendors, by 2005 worldwide security products revenue:

1	Symantec Corp.	\$2.4B
2	Cisco Systems Inc.	\$1.6B
3	McAfee Inc.	\$958.5M
4	CA Inc.	\$698.7M
5	Trend Micro Inc.	\$621.9M
6	Check Point Software Technologies Inc.	\$531.5M
7	Juniper Networks Inc.	\$427.6M
8	IBM	\$352.9M
9	Microsoft Corp.	\$306.2M
10	RSA Security Inc.	\$292M

Steady Climb

Worldwide security products and services revenue forecast:



SOURCE: IOC SECURITY SURVEY, DECEMBER 2006

Shred Your Bits For Safety's Sake

Jeff Jonas, chief scientist and distinguished engineer at IBM's Entity Analytic Solutions group, has developed a means of sharing corporate data without revealing what that data contains.

This technology, called anonymization, effectively "shreds" information, making it possible for companies to share information about their customers with governments or other companies without giving away any personal data. Jonas believes that over time, companies will increasingly use anonymization to defend their data — and corporate well-being — from competitors and identity thieves.

Jonas recently sat down with IDG News Service's Sumner Lemon in Singapore to discuss anonymization and how protecting customer privacy will make businesses more competitive.

How does anonymization work? Normally, somebody with data encrypts it, and then they transfer it. Then, the recipient decrypts the data to use it. But while it's in transit — in flight — it's encrypted. Cryptographers have invented math that allows you to shred something and then unshred it, encrypt it and then decrypt it.

Part of cryptography is something else that creates digital signatures. Smart math people have invented algorithms that are called one-way hashes. It looks like encryption because you put in data and what comes out is not readable to humans. But there's no way to take what came out and take the math and run it backwards and get the input value. That's why I use the example of a pig and a sausage. If I give you the sausage and the grinder, you can't go backwards and make a pig.

I took advantage of something that someone else has made, and I used it in a slightly different way for a new result.

In effect, the process of anonymization creates digital signatures of information that

can be compared against other signatures for possible matches. At the same time, the signatures cannot be used to recreate the original data. Normally, I have data and you have data, and we want to figure out what our data means together. But I don't want to give you mine, and you don't want to give me yours. This is why information sharing will fail: Everyone wants to be the recipient.

Sometimes a government may pass a law that says I, as a company, have to give you my data. Maybe you have a watch list, and you don't want me to see it. That's how I ended up creating this. I was getting ready to take my kids on a cruise. I made the reservations and then saw in a newspaper that there was a

threat against Port Canaveral, Fla., from terrorist scuba divers. I was thinking, "Oh no, I'm taking my kids on a cruise."

The U.S. government has this really cool, big list of bad guys. They don't send it to the cruise line. And the cruise line has all these reservations, and they don't send it all to the government. You could take 10 bad guys, [and] they could just sneak across the border, use their real names and get on the cruise ship. That was the tension point. All of the work I had done prior allows an organization to share data with itself. What happens if you want to share data across two organizations and only find things in common? How would you do that?

In the past, you've noted that personal information will get more valuable over time. Where is the incentive for companies to make anonymization of data a common practice? Well, this is my theory. The pressures to an organization, every time it makes a copy of its data and sends it someplace else, [is that] the risk of someone stealing it grows. It's now twice as hard to protect, because you've just made a copy. You think it's hard to protect this copy, but now you have two copies. Then you make another copy and send it to a database

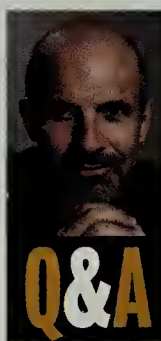
marketing company — now there are three copies. That creates real stress for an enterprise that's trying to manage their data.

The incentive for a company to use anonymization then becomes protection of its own resources, rather than defending the privacy of customers? Right. Corporations spend more time trying to be competitive than protecting privacy. If they spent all their time protecting privacy, they couldn't become more competitive — they would become nonexistent. I spend 40% of my time now working on privacy and civil liberties. You're right on the crux of this point: How do you create things that companies want to deploy, that make them more competitive and are good for privacy at the same time? Consumers traded privacy left and right for convenience.

And there's no way to get it back at this point. Yeah. The toothpaste is out of the tube. Companies don't just say they want to spend money on privacy. They don't, and I don't see that as a trend. You have to create something that can make them more competitive. Corporations are very risk-averse. The notion of losing all their customer data — either to a competitor or identity thieves — and then having to make a public announcement that they lost all of their banking data or all of their medical data, it can destroy their entire brand.

If you can show them how to be more competitive and at the same time reduce their risk exposure, then you are taking them on a journey, like in the case of anonymization, that is more responsible than not.

It's a very new thing to be able to analyze data after it's been shredded. I am trying to teach the technique, and I've heard other companies have announced they're going to create products like that, which is really good. There's a growing number of people using anonymization, and I think the wave is coming. ▀



Q&A

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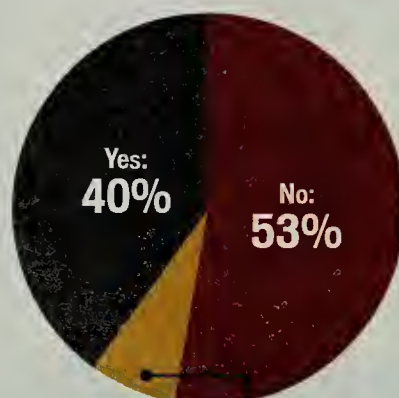
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Snapshots

IM Nation

Does your company use instant messaging as a sanctioned form of interoffice or intercompany communication?

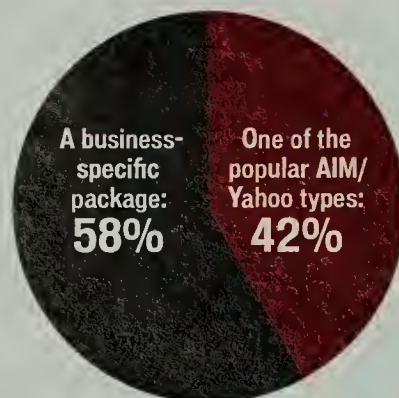


Don't know/
not sure: 7%

BASE: 113 IT MANAGERS

Business Basic

What type of IM do you use?



BASE: THE 45 RESPONDENTS WHO SAID THEIR COMPANIES USE IM

Half On Board

Does your company have a policy that covers employees' use of instant messaging?



BASE: THE 45 RESPONDENTS WHO SAID THEIR COMPANIES USE IM

SOURCE: EXCLUSIVE COMPUTERWORLD SURVEY, FEBRUARY 2007

MARK HALL

Get Serious

WHEN CIOs stop buying computers that lack public-key encryption tools, that's when companies will begin to get serious about data protection. When CIOs start using encryption communications services that permit only messages to and from whitelisted sources, that's when IT management will be seen as serious about securing business information. Until then, IT executives are merely pretending to defend their companies and their people.

It's up to CIOs to take the lead in this, and I'm flummoxed as to why the top IT leaders at the biggest and best companies are afraid to tackle the issue head-on. When the big manufacturers latched onto the notion of electronic data interchange, suppliers around the world had to adopt the technology or lose business. When Wal-Mart demanded that its suppliers use RFID, companies raced to see who could get there first. But to date, no big IT organization has told its stakeholders that henceforth all communications will be secure, meaning "use encryption and get on our whitelist or get lost."

It's time for CIOs to stop dillydallying with Band-Aid solutions like "endpoint" security and arguing about the finer points of agent or agentless approaches. The only serious issues to debate revolve around encryption key management and which encryption services to use. Stop yakking. Act.

Our messaging systems, thanks to the Internet and mobility, are in dire straits because of malware. Take viruses. Chinese antivirus firm Rising reports that last year, 234,211 new viruses appeared in China alone, with 90% of them designed to steal information from users. Postini (whose service *Computerworld* uses to filter its considerable malware and spam) reports that in December 2006, 94% of all e-mail sent was spam. The 2007 Postini Intelligence Report goes on to fret that the existence of botnets, which are hiding behind more than 1 million IP addresses, "threatens the viability of e-mail as a productive business tool." And the overhead for processing mail leapt 334% in 2006 because of tricks such as image-based spam, says Postini. In effect, the IT resources needed to deal with evil e-mail tripled last year, while fewer than one in 10 of the messages was worth receiving.

If you think the big IT vendors fully grasp the problem, think again. In 2004, Bill Gates told the World Economic Forum that spam would cease to be a problem. "Two years from now, spam will be solved," he said. Not quite. Vendors won't solve this problem. You will, by taking the lead to accept only encrypted messages from known entities on your whitelist.

Here's how you do it. First, jettison the snail-mail

mentality that believes electronic messages should be treated exactly like communications handled by various nations' post offices, which endeavor to deliver all letters and packages to any address on their countless mail routes. Certainly, such a system made complete sense during the Age of Enlightenment, when postal networks emerged in the West. And it still serves us extremely well today. But e-mail, instant messages, text messages and the like aren't the same. Just because someone gets your Internet address, there's no earthly reason to assume that person has the right to deliver something to your PC in-box without your approval, especially when the contents of so many messages contain programs designed to waste your time, destroy your data, steal your identity or rob you blind.

Second, IT should encrypt all messages going out of the company and accept only encrypted communications from sources that it subscribes to, using a publish-and-subscribe model between the organization and outsiders. There are numerous companies — Hush Communications, Lux Scientiae, Microsoft and PGP, to name a few — that offer encryption products and/or services and will gladly provide publish-and-subscribe-style communications.

Third, you will need to plan for transition problems. Companies and people with whom you now communicate in clear text freely over the Internet will complain

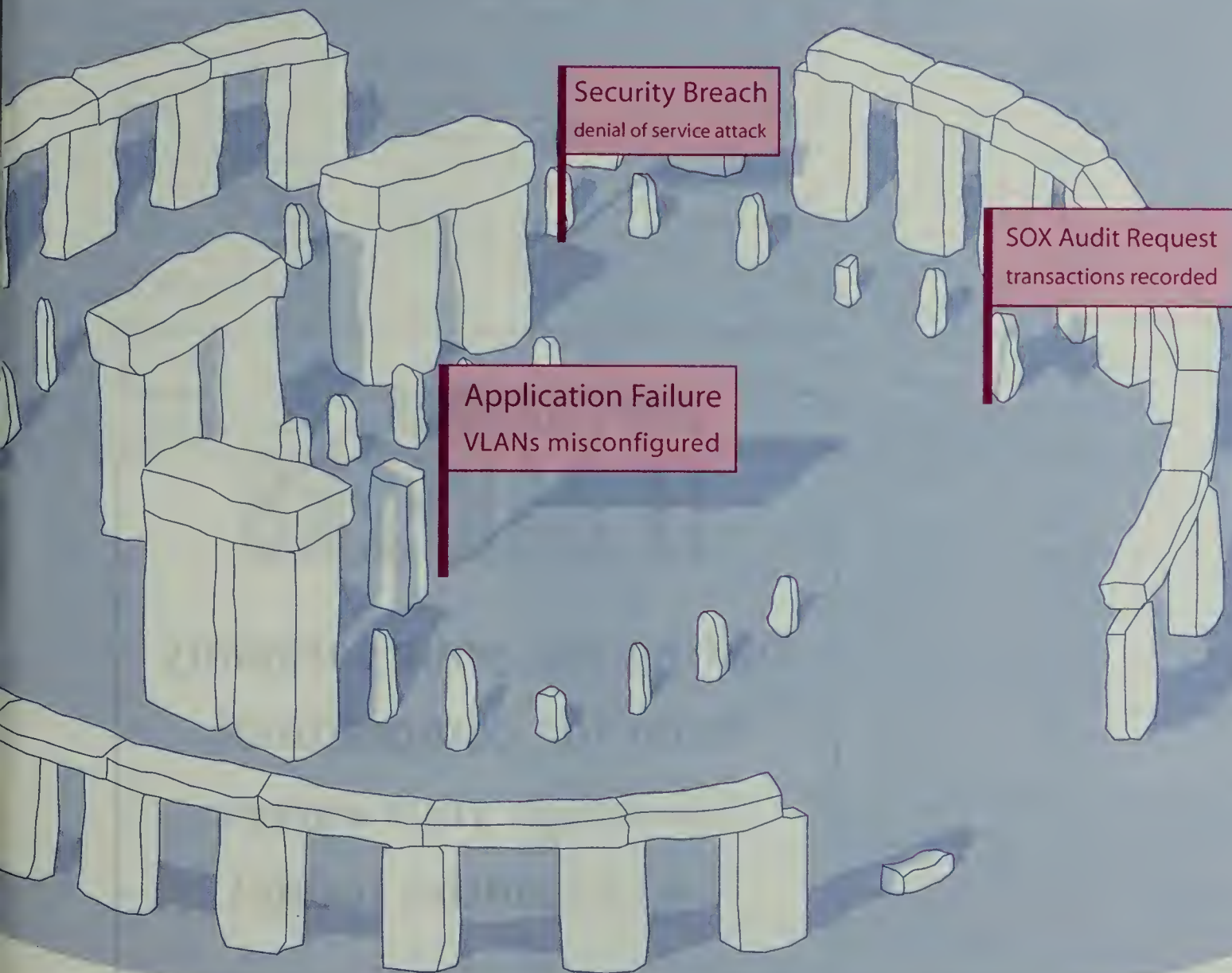
about having to subscribe to your whitelist and add encryption tools to their organizations. You'll need to tell people that effective security is now part of the cost of doing business with your company, just as you did when people started whining about EDI and RFID. Naturally, you will need to develop business processes to let people in your organization add their friends and family members to the whitelist and get them accounts on public encryption services. Those are minor details.

The big win will be in security. Think about it: If all your communications are encrypted, and you manage the keys and only those on your whitelist can get through, malware will wither and die. That's serious security. ▀



MARK HALL is a *Computerworld* editor at large. Contact him at mark_hall@computerworld.com.

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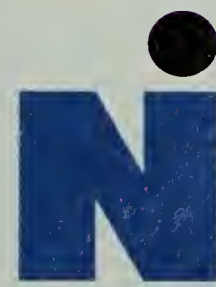


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Oracle Unveils Governance, Risk Management Tools

Promises to monitor compliance with rules such as the Sarbanes-Oxley Act

BY MARC L. SONGINI

ORACLE CORP. has rolled out a new set of applications that it says can help IT managers implement corporate risk management and financial reporting compliance procedures.

The new Oracle Governance, Risk and Compliance (GRC) suite combines business intelligence capabilities in some Oracle-developed products with the compliance management and enterprise content management tools Or-

acle gained with its acquisition of Stellent Inc. last November, the company said.

Aaron Sager, manager of business systems at ViaSat Inc., a Carlsbad, Calif.-based provider of satellite and wireless communications equipment, said he intends to use the tools to better automate his company's efforts to comply with the Sarbanes-Oxley Act.

ViaSat currently uses the Oracle Internal Controls Manager in E-Business Suite 11i to ensure compliance

with federal requirements for creating corporate financial controls, Sager explained. The company uses the Internal Controls Manager to support documentation and compliance procedures, he said.

Playing by the Rules

Sager said he hopes that the GRC Application Configuration Controls module can be used to establish a set of rules and then ensure that they are enforced. The tool promises to send out alerts if the rules are violated, he said.

For example, Sager said, ViaSat could have an accounts-payable policy for transactions

dictating that a purchase order be within a predetermined percentage of the amount of the invoice. If someone were to change this policy, an alert would be sent to the appropriate employee and the change prevented, he explained.

ViaSat plans to start rolling out the new Oracle software later this year.

The Oracle GRC suite of tools expands considerably on the compliance support capabilities in the company's E-Business Suite 11i software by supporting both Oracle and non-Oracle business applications, according to Folia Grace, vice president of applications marketing.

The suite, unveiled earlier this month, includes Oracle Fusion GRC Intelligence, which provides an out-of-the-box dashboard along with reporting capabilities.

It also includes the Oracle GRC Manager, which monitors business risks, automatically highlights potential weaknesses and initiates corrective actions.

In addition, the suite includes the Application Configuration Controls tool, which is designed to monitor 500 control processes in the Oracle E-Business Suite and help enforce corporate policies, the company said.

Michael Rasmussen, an analyst at Cambridge, Mass.-based Forrester Research Inc., said the new offering includes a comprehensive and sophisticated set of tools that support international reporting rules and complete risk-management processes.

All products in the GRC suite will be available later this year. Pricing starts at \$995 per user. ▀

Continued from page 1

J-SOX

— nobody really knows” the specific requirements yet, said Michael Pellegrino, vice president of IT at Fuji Photo Film U.S.A. Inc., a Valhalla, N.Y.-based subsidiary of Tokyo-based Fujifilm Corp.

As the largest of Fujifilm's 12 North American subsidiaries, Pellegrino's group is following the lead of its parent firm's IT operations on what steps it should take to document its IT controls.

Pellegrino noted that as part of its due-diligence efforts, his company is already creating a “matrix” of all its hardware, the IP addresses for those machines and the software that runs on them.

He said that his organization expects to document the controls it has in place for several IT processes that could affect the company's financial activities. Among them are those related to the

procurement and development of software applications, the procurement and development of IT infrastructure, the deployment and testing of IT, and the management of third-party IT services.

Sarb-Ox Lessons Learned

J-SOX, officially known as the Financial Instruments and Exchange Law, is scheduled to go into effect in April 2008 for roughly 3,800 companies listed in Japan, along with their foreign subsidiaries.

Japan's Financial Services Agency — similar to the U.S. Securities and Exchange Commission — moved to create J-SOX laws following accounting scandals involving companies such as Seibu Railway Co., Livedoor Co. and the Murakami Fund.

Marios Damianides, an IT

risk management consultant and partner at Ernst & Young LLP in New York, said he expects that the relaxation of some Sarbanes-Oxley requirements by the Public Company Accounting Oversight Board in the U.S. late last year should help ensure that the J-SOX rules won't be excessive for businesses.

The lessons learned from U.S. companies' Sarbanes-Oxley efforts will lead Japan's Financial Services Agency to “soften J-SOX [requirements] a little bit,” said Damianides, a former international president of the Information Systems Audit and Control Association.

As part of its effort to meet J-SOX requirements, Tokyo Electron Ltd. is revising its security and IT policies “to conform with what J-SOX is



“We're working hard on the things we know about. As soon as J-SOX gets approved, we'll be an early adopter,” says Tokyo Electron's RUSS FINNEY.

“This is just like the early stages of Sarbanes-Oxley – nobody really knows [the specific requirements].”

MICHAEL PELLEGRINO,
VICE PRESIDENT OF IT,
FUJI PHOTO FILM U.S.A. INC.

going to look like,” said Russ Finney, CIO at Tokyo Electron America Inc. in Austin. “It's going to be a lot of work.”

That work will involve tracking and monitoring the company's global IT systems, as well as documenting the security safeguards it has in place for each of those systems, said Finney.

“I would anticipate that we'd be in good shape” regarding IT asset tracking, since Tokyo

Electron already does that, said Finney.

But, like Fuji Photo's Pellegrino, Finney and his IT team in Austin can only address the J-SOX requirements that have been made clear by Japan's Financial Services Agency.

“We're working hard on the things we know about,” said Finney. “As soon as J-SOX gets approved, we'll be an early adopter.”

Many Japanese companies may have a jump-start in meeting the requirements because IT asset tracking is already commonly practiced by most businesses in the country, said Masafumi Tanabu, a partner at Tokyo-based KPMG AZSA & Co. The firm is helping its accounting customers comply with the regulatory framework.

In Japan, companies must denote individual assets, such as servers and desktop machines, in their accounting records and expense those assets in order to receive tax benefits for them, Tanabu noted. ▀



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FRANK HAYES ■ FRANKLY SPEAKING

HP 4 No More?

WHAT NOW for the Hewlett-Packard Four? You've already seen the headlines: Last week, a Silicon Valley judge dropped all charges against former HP Chairwoman Patricia Dunn and three other defendants in the HP pretexting scandal, in which news reporters and HP board members were spied on and impersonated as part of an ill-conceived effort to stop leaks to the media.

Three of the defendants will each do 96 hours of community service. Dunn, who has cancer, won't. Case dismissed.

Yes, it does sound like the fix was in. But unwinding this tangled web suggests that maybe it's not so simple — just sad.

To recap what's gone before: Last October, the California attorney general charged Dunn, Kevin Hunsaker, Ronald DeLia, Matthew Depante and Bryan Wagner with fraudulently obtaining confidential records, identity theft, accessing computer data without authorization, and conspiracy.

The last guy on that list, Wagner, actually did the pretexting. He was an independent contractor in Colorado working for Depante, a manager at a Florida data-brokering company. Depante's company was hired by DeLia, who runs a Boston security outfit that regularly did work for HP. DeLia reported to Hunsaker, HP's chief ethics officer, who reported to Dunn. That's the daisy chain of the conspiracy.

In January, Wagner pleaded guilty to federal charges of conspiracy and wire fraud. The charges have a minimum sentence of two years in prison, but the judge may be lenient when Wagner is sentenced in June, because he's cooperating with the feds.

Last week, Depante, DeLia and Hunsaker tried to plead no contest to reduced charges of misdemeanor wire fraud. The judge rejected the pleas and instead proposed that if they made restitution and did community service within six months, he'd spike the charges. The same day, charges against Dunn were dropped because of her health problems.

Why the very attractive deal now? A cynic might notice that the original felony charges were filed by California Attorney General Bill Lockyer during his campaign for state treasurer. Now, Lockyer has won his election, former Gov. Jerry Brown is the new attorney general, and the felony charges have evaporated.

So is it really over? No. HP has agreed to pay \$14.5 million to settle

a civil suit filed by California. But at least one other lawsuit, filed against board members by an HP stockholder in September, is still pending.

And Depante, DeLia and Hunsaker still face potential federal charges, especially now that Wagner will testify for the feds. But U.S. Attorney Kevin Ryan, who turned Wagner, is one of the eight federal prosecutors recently fired for what may have been political reasons. Whether his successor will pursue the case is up in the air.

What about Dunn, who launched this fiasco? The prosecutor's office said charges were dropped not because Dunn was innocent but because of her health: Since 2000, Dunn has been treated for breast cancer, skin cancer, ovarian cancer and a cancerous tumor in her liver.

Then again, the case against Dunn would be exceptionally hard to prove. There's a paper trail showing that everyone up to Hunsaker knew about the illegal pretexting. (When told about it by e-mail, ethics honcho Hunsaker responded, "I shouldn't have asked.")

But among hundreds of e-mails, reports, memos and notes turned over to investigators, no proof has turned up that Dunn knew about the pretexting. And at least four different lawyers assured Dunn that everything being done in her leak investigation was legal. That's the sort of thing that gives juries reasonable doubt — and prompts prosecutors to drop charges.

Not so simple as the fix being in, is it? Just disgusting, nightmarish and sad — not least for all the people at HP who wish they'd never heard of the Hewlett-Packard Four.

And who remember a time when the names Hewlett and Packard stood for something very different in Silicon Valley. ▀



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Complaint Department

Sysadmin pilot fish gets to the office on Monday morning and finds a few voice mails from users complaining that they can't connect to the server. Sure enough, the system has been down since 2:30 a.m. Saturday. Fish reboots it, but an hour later, the president comes in and proceeds to chew him out. "There should be a procedure in place for when the systems go down on the weekends," president says. "There were five of us in on Saturday, and we couldn't get on the system." Did anyone try calling any of the IT staff at home? fish asks. "No," roars president. "You're supposed to know when it's down!"

Road Trip

User in a remote office 85 miles away calls IT tech, complain-

ing that the tool bar on her Windows desktop is gone. "The tech attempted to help her by phone, but nothing they tried would redisplay the tool bar," says a pilot fish on the scene. "Upon arrival at her office, he found her monitor sporting a brand-new magnifier/antiglare screen. You guessed it: The magnifier is just a tad smaller than her monitor. The missing tool bar was found behind its lower frame. At least it was a nice day for a 170-mile drive."

Enlightenment

IT operations pilot fish gets a message from a district manager who says one of the networked color security cameras is only showing images in black and white. "I dial into that location and check out the problem camera," fish reports. "Camera is in color and appears to



be fine. I then recheck the e-mail. Sure enough, it was sent before

7 a.m. — well before the building is opened for business and the lights inside the warehouse where the camera is located are turned on."

Be Nice, Now

Software engineer is setting up laptops for a mobile health clinic and has to demonstrate them to the doctors who will use them. "I mentioned that the password can be changed," fish says. "During the presentation, one of the doctors interrupted to ask, 'Do we have to enter the password every time?' I sighed and replied of course. Then the doctor went on: 'Perhaps we could write it down and affix it to the computer.' I knew what he meant, but I bit my tongue and said, 'As long as you remove it before you actually do the clinics — otherwise that would compromise our data security.'"



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